

DEPARTMENT OF DEFENSE

REPORT  
OF INVESTIGATION



DEFENSE LOGISTICS AGENCY  
OFFICE OF INSPECTOR GENERAL  
INVESTIGATIONS DIVISION

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DEFENSE LOGISTICS AGENCY  
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FORT BELVOIR, VIRGINIA 22060-6221

September 28, 2018

MEMORANDUM FOR SEE DISTRIBUTION

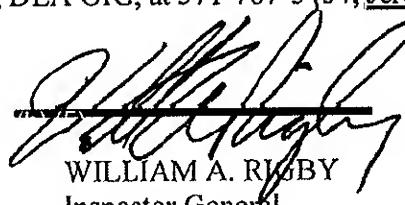
SUBJECT: DLA OIG ID Initiative 2018-DLA-INI-0005

On January 16, 2018, the DLA Deputy Inspector General for Investigations directed a DLA OIG Initiative be opened to examine procedures and controls within the DoD Demilitarization (DEMIL)/Trade Security Controls Program Office (DDPO). The purpose was to determine if the DDPO followed DoD, Department of Commerce, and Department of State requirements in establishing DEMIL Codes.

Our examination established that the DDPO is properly coordinating, establishing, and verifying DEMIL Codes for rolling stock in accordance with Public Law, Department of State, Department of Commerce, and DoD directives, instructions, and manuals. We also examined the DLA Disposition Services Business Case Analysis conducted to determine the cost effectiveness of mutilation vs. removal of key parts on some DEMIL C and Q3 coded rolling stock.

The examination determined there were no findings. We provide one observation that the DDPO should establish an Instruction for the DEMIL Code procedures followed by DLA. We recommend the DDPO develop and publish an Instruction, which the DDPO began during this examination. The DDPO is developing DLA DEMIL Instruction 4160.02 (in development, number assignment not confirmed) and DLA TSC Instruction 2030.XX to clarify responsibilities and authorities, as well as implement program execution across the enterprise. Publication of these instructions will be considered responsive to this report.

Point of contact is Jerold Unruh, DLA OIG, at 571-767-5454, [Jerold.Unruh@dla.mil](mailto:Jerold.Unruh@dla.mil).



WILLIAM A. RUGBY  
Inspector General

Attachment

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**DEFENSE LOGISTICS AGENCY  
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**September 28, 2018**

**MEMORANDUM FOR SEE DISTRIBUTION**

**SUBJECT: INITIATIVE REPORT  
DLA OIG Control Number 2018-DLA-INI-0005**

REPORTED BY: Special Agent (b) (6), (b) (7)(C) DLA Office of the Inspector General (OIG), Investigations Division, Fort Belvoir, VA

**BACKGROUND:**

On January 16, 2018, after receiving a query regarding the demilitarization (DEMIL) status of several vehicle series, the DLA Deputy Inspector General for Investigations directed a DLA OIG Initiative be opened to examine procedures and controls within the DoD Demilitarization (DEMIL)/Trade Security Controls Program Office (DDPO). The purpose of this initiative was to determine if the DDPO followed DoD, Department of Commerce, and Department of State requirements in establishing DEMIL Codes.

**EXECUTIVE SUMMARY:** The DoD Demilitarization /Trade Security Controls Program Office (DDPO) is properly coordinating, establishing, and verifying DEMIL Codes for rolling stock in accordance with Public Law, Department of State, Department of Commerce, and Department of Defense directives, instructions, and manuals. In instances where some rolling stock could be made eligible for sale to the public after removal of military specific parts, analysis of the costs compared to the potential return on investment by appropriate officials resulted in reasonable decisions that were properly documented, approved, and undertaken.

**OBSERVATION:** The DDPO is developing DLA DEMIL Instruction 4160.02 (in development, number assignment not confirmed) and DLA TSC Instruction 2030.XX to clarify responsibilities, authorities, and implement program execution across the enterprise.

**RECOMMENDATION:** These instructions are critical and publication should be prioritized. Consideration should be given to a Manual or SOP that codifies and chronicles DDPO processes and procedures in executing their mission.

**DISCUSSION OF THE EXAMINATION:**

The DDPO web page, (<https://demil.osd.mil>), describes the mission. DoD Instruction (DoDI) 4160.28, DoD Demilitarization (DEMIL) Program, dated April 7, 2011, Incorporating Change 1, September 14, 2017, requires the Director DLA to maintain a DoD DEMIL Program Office under the authority, direction and control of USD (AT&L). The DoDI requires meetings with Military Services and Defense Agency DEMIL Program administrators as-required, to discuss

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DEMIL procedural changes, potential policy impact; and to review and take appropriate action on request for waivers and modifications (Exhibit 1).

DLA executes management, control, and oversight of the DoD DEMIL Program in coordination with the Office of the Assistant Secretary of Defense (ASD) Logistics and Material Readiness (L&MR) and the Heads of the DoD Components. The development of implementing guidance comes from the Office of the Under Secretary of Defense (USD) for Acquisition, Technology and Logistics (AT&L), and implementation rests with ASD L&MR.

DoD Manual 4160.28 Volume 1, Defense Demilitarization: Program Administration, dated August 9, 2017, incorporating Change 1, January 16, 2018, defines responsibilities and reflects that the Director DLA maintains the DoD Demilitarization Program Office and designates the DoD Demilitarization Program Manager (DDPM) who reports to the Director, DLA for managing, controlling and overseeing the DoD DEMIL Program. It also establishes the DoD DEMIL Policy Working Group and assigns other responsibilities to the DEMIL Program Manager (Exhibit 2).

DoD Instruction 2030.08, Implementation of Trade Security Controls (TSCs) for Transfers of DoD Personal Property to Parties Outside of DoD Control, dated February 19, 2015, Incorporating Change 1, May 24, 2017, reinforces DoD DEMIL provisions in accordance with DoDI 4160.28 and DoD Manual 4160.28, and assigns responsibilities to the Director DLA to manage the DoD TSC program (Exhibit 3).

The DDPO is subordinate to the DLA Logistics Operations (J3), Logistics Policy & Strategic Programs Executive Directorate (J34), Disposal Policy and Compliance (J349). The DDPO office consists of a DoD Demilitarization Program Manager (DDPM) and a Deputy Program Manager (Exhibit 4). The DDPO is responsible for the following publications:

- DoD Instruction 4160.28, DoD Demilitarization (DEMIL) Program, dated April 7, 2011, Incorporating Change 1, September 14, 2017 (Exhibit 1)
- DoD Manual 4160.28, Volume 1, Defense Demilitarization: Program Administration, dated August 9, 2017, Change 1 Effective, January 16, 2018 (Exhibit 2)
- DoD Manual 4160.28, Volume 2, Defense Demilitarization: Demilitarization Coding, dated March 9, 2017, Change 1 Effective: December 1, 2017 (Exhibit 5)
- DoD Manual 4160.28, Volume 3, Defense Demilitarization: Procedural Guidance, dated June 7, 2011, Incorporating Change 1, February 9, 2018 (Exhibit 6)
- DoD Manual 4100.39, Federal Logistics Information System (FLIS) Procedures, dated March 8, 2017, Change 1 Effective October 5, 2017, Volume 10, Technical Procedures, Multiple Application References/Instructions/Tables and Grids, Tables 38, 61, 192, 216 (Exhibit 7)

The DDPO is the primary coordinating component for DoD Instruction 2030.08, Implementation of Trade Security Controls (TSCs) for Transfers of DoD Personal Property to Parties Outside of DoD Control, dated February 19, 2015, Incorporating Change 1, May 24, 2017 (Exhibit 3)

DLA J3 General Order No: 13-13, dated November 2013, Technical and Quality Assurance Division, and J3 General Order No: 08-15, effective October 2015, the Disposal Policy and Compliance Division (J349) (Exhibit 8) establishes this relationship. At the time of publication of General Order 13-13 the DDPO was assigned to the Technical & Quality Assurance Division (J344), subsequently the DDPO was realigned to the Disposal Policy and Compliance Division (J349).

DoD Manual 4160.28, Volume 1, Defense Demilitarization: Program Administration, dated August 9, 2017, Section 2: Responsibilities, Paragraph 2.2.b requires the Director, DLA to establish the DoD DEMIL Policy Working Group (Exhibit 2). Paragraph 2.5.f, requires the Secretaries of the Military Departments to provide Military Department representation at DDPM led working groups. The DoD DEMIL Policy Working Group was informally established and met weekly. The DoD DEMIL Policy Working Group was led by either the DDPM or Deputy and included members of the Military Services, Coast Guard, Defense Lifecycle Planning Center, DoD Demilitarization Coding Management Office (DDCMO), and DLA Disposition Services Controlled Property Verification Office. Decisions of the DoD DEMIL Policy Working Group requiring guidance was published by the DDPO and made available via the website <https://demil.osd.mil/demilguid.aspx#ddpmguidance>. There is no requirement for formal coordination of DDPO guidance prior to publication. Minutes of the working group sessions are prepared, maintained, and distributed to the working group. Copies are retained in DDPO files. There is no formal guidance for the DoD DEMIL Policy Working Group to identify its purpose, objectives, governance, responsibilities, sponsorship, membership and business rules but guidance is being drafted.

The DoD DEMIL Coding process is governed by DoD Instruction and Manuals of the 4160.28 series. Per DoD Instruction 4160.28, DoD Demilitarization (DEMIL) Program Enclosure 2, Paragraph 3.a.(1), the Director, DLA, will maintain a DDPO and DDPM to provide management control and oversight of the DoD DEMIL Program to include providing guidelines for the identification and DEMIL of DoD personal property to prevent its unauthorized use and potential compromise of U.S. national security (Exhibit 1). Enclosure 2, Paragraph 6.d. requires the Military Departments to assign accurate DEMIL codes to every item of DoD personal property for which each Military Department has management responsibility to include items for which logistic responsibility has been reassigned.

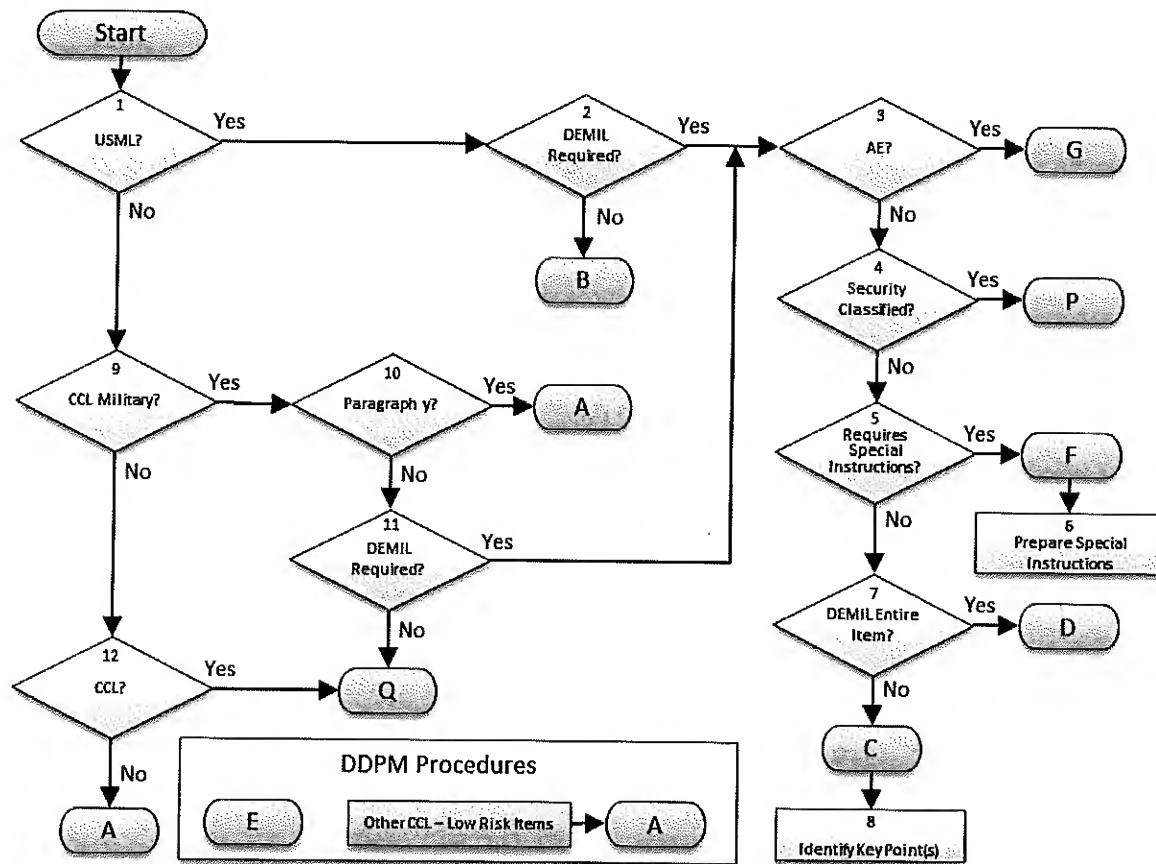
The DDPO explained the DEMIL code assignment framework was the Department of State, Directorate of Defense Trade Controls, United States Munitions List (USML) as published in the Code of Federal Regulations, Title 22, Chapter I Department of State, Sub-chapter M International Traffic in Arms Regulations Section 121, [https://www.ecfr.gov/cgi-bin/text-idx?node=pt22.1.121#se22.1.121\\_11](https://www.ecfr.gov/cgi-bin/text-idx?node=pt22.1.121#se22.1.121_11), and the Department of Commerce, Bureau of Industry and Security, Commerce Control List (CCL), <https://www.bis.doc.gov/index.php/regulations/commerce-control-list-ccl>. The USML listed articles, services, and related technical data that were designated as defense articles or defense services pursuant to the Arms Export Control Act. The CCL identified licensing requirements for exporting items outside the U.S.

The process for assigning the DEMIL codes is detailed in DoD Manual 4160.28, Volume 2, Defense Demilitarization: Demilitarization Coding (Exhibit 5). The manual detailed that DEMIL codes will be assigned by DoD Components based on technical characteristics, at the time of procurement or National Stock Number (NSN) assignment, and reviews of the code will be conducted after changes have been made to the item. DEMIL coders will use the manual's process illustrated in Figure 1, with steps described in Table 2, and supporting information in Tables 3 to 23.

The nine DEMIL codes from DoD Manual 4160.28, Volume 2, Table 1, are described below:

Code	DEMIL Requirements
G	USML or CCL Military Items – <b>DEMIL required</b> – ammunition and explosives (AE). This code applies to both unclassified and classified AE items.
P	USML Items – <b>DEMIL required</b> . Security classified items.
F	USML or CCL Military Items – <b>DEMIL required</b> . Item managers, equipment specialists, or product specialists must furnish special DEMIL instructions.
D	USML or CCL Military Items – <b>DEMIL required</b> . Destroy item and components to prevent restoration or repair to a usable condition.
C	USML or CCL Military Items – <b>DEMIL required</b> . Remove or demilitarize installed key point(s) items as DEMIL code “D.”
E	DoD DEMIL Program Office reserves this code for its exclusive-use only. DEMIL instructions must be furnished by the DoD DEMIL Program Office.
B	USML Items – Mutilation (MUT) to the point of scrap required worldwide.
Q	Commerce Control List Item (CCLI) – MUT to the point of scrap required outside the United States. Inside the United States, MUT is required when the DEMIL integrity code (IC) is “3” and MUT is not required when the DEMIL IC is “6.”
A	Items subject to the Export Administration Regulations (EAR) in parts 730-774 of Title 15, Code of Federal Regulations (CFR) (CCLI or EAR99) and determined by the DoD to present a low risk when released out of DoD control. No DEMIL, MUT, or end use certificate is required. May require an export license from DOC.

The DEMIL Code Assignment Process from DoD Manual 4160.28, Volume 2, Figure 1, is described below. As stated above, the framework of the DEMIL process is the USML and CCL, those are the first two steps of the process.



When these first two steps are completed and the DEMIL code has been assigned to the NSN the NSN and DEMIL code are uploaded into the Federal Logistics Information System (FLIS), the central repository of logistics management information, in accordance with DoD Manual 4100.39 (Exhibit 7). Once the DEMIL code has been assigned to a NSN that code doesn't change, and modifications to the item the NSN is attached to may result in a new NSN and DEMIL code. When the DEMIL code and justifying elements, pertinent DEMIL Coding Manual citation (military items) or non-military CCL ECCN (dual-use items), are entered into FLIS, DEMIL Integrity Codes were used as a management tool validating the DEMIL Codes. DEMIL Integrity Codes are detailed below and in Exhibit 7.

The DoD Demilitarization Coding Management Office (DDCMO), identified in the following table as "DCMO", falls within DLA Logistics Operations, Logistics Policy & Strategic

Programs, (J34) (Exhibit 4) and reviews and validates DEMIL codes per DoD Instruction 4160.28, DoD Demilitarization Program (Enclosure 1). ICP in the following table refers to inventory control point.

DEMIL INTEGRITY CODE	DEFINITION
BLANK	DEMIL code has not been reviewed by DCMO.
0	DEMIL code reviewed by DCMO. Recommended DEMIL code and current ICP DEMIL code are not equal. Presently in collaboration cycle.
1	DEMIL code reviewed by DCMO, recommended DEMIL code adopted by ICP, or no DEMIL code change recommended.
2	DEMIL code reviewed by DCMO and accepted by ICP (DEMIL Integrity Code = 1) however, ICP has since overridden/changed code.
3	Critical FSC/FSG MLI or Sensitive CCLI. Requires mutilation worldwide.
4	DEMIL code could not be validated — insufficient technical data available.
5	(1) Item reviewed and coded by Service/Agency ICP - without DCMO collaboration; or, (2) Service/Agency ICP changed the DEMIL code prior to completion of IC-0 review/collaboration cycle.
6	Non-Critical FSC/FSG MLI or Non-Sensitive CCLI. Requires mutilation overseas.
7	Forced Concurrence. DCMO has forced a DEMIL code change in FLIS. ICP has not responded to collaboration request (over 90 days old) or failed to update the DEMIL code in the ICPs legacy system.
8	ICP has non-concurred with a DCMO recommended DEMIL Code. Item DEMIL coding pending resolution.
9	Reserved for future use.

DEMIL Coding of rolling stock was an issue that required additional analysis. Military specific vehicles (vehicles that are not available commercially but produced specifically for military use) require some form of DEMIL or MUT prior to being released outside of DoD control. DEMIL codes for "Ground Vehicles to include "tactical" are prescribed in the DoD Manual 4160.28, Volume 2, under Table 9, "Ground Vehicles", and go across a range of actions:

- DEMIL D (destroy item and components to prevent restoration or repair to a usable condition)
- DEMIL C (remove key points; typically key points are items assigned DEMIL code D or Q3)
- DEMIL Q3 Sensitive export controlled (mutilation required; non-sales eligible due to being military unique)
- DEMIL Q6 Non-sensitive export controlled (mutilation required outside of the U.S.; sales eligible in the U.S. but DoD Trade Security Controls apply)

In support of this initiative, DDCMO reviewed twenty-five various ground vehicle DEMIL codes, two ground-vehicle chassis DEMIL codes, and fifty-one High Mobility Multi Wheeled Vehicle (HMMWV) variant DEMIL codes. The DDPO consulted Department of Commerce, Department of State, and Defense Technical Security Administration to determine if DoD DEMIL coding assignments were reflective of the item's export-controls, resulting in no concerns being identified. DEMIL codes were found to be within guidance.

CAT 950E Loader – a commercial Caterpillar Wheel Loader with DEMIL Code A1

FLU419 – a Daimler Truck mini-excavator with DEMIL Code A1

M16A2 – a World War II era half-track with no DEMIL Code

M29 – a World War II era tracked vehicle with no DEMIL Code

M35A2 –DEMIL Code F but once certain components were removed the DEMIL Code was Q6.

M548 – the A1 version was DEMIL Code D in 1980 but changed to DEMIL C in 2002 and remains this code. A note revealed a review of the DEMIL code in 2014 wherein the Engine was DEMIL Code C and Track and Components were DEMIL Code E while other components were DEMIL Code B and A. The A3 version was cataloged DEMIL Code C in 1992 with no changes since.

M923 – M923, A1 and A2 variants were DEMIL Code Q6

M924 – M924 and A1 variant were DEMIL Code Q6

M925 –M925, A1 and A2 variants were DEMIL Code Q6

M926 –M926 and A1 variant were DEMIL Code Q6

M927 – M927, A1 and A2 variants were DEMIL Code Q6

M928 –M928, A1 and A2 variants were DEMIL Code Q6

M929 – M929, A1 and A2 variants were DEMIL Code Q6

M930 – M930, A1 and A2 variants were DEMIL Code Q6

M931 – M931, A1 and A2 variants were DEMIL Code Q6

M932 – M932, A1 and A2 variants were DEMIL Code Q6

M934 – M934, A1 and A2 variants were DEMIL Code Q6

M935 – M935, A1 and A2 variants were DEMIL Code Q6

M936 – M936, A1 and A2 variants were DEMIL Code Q6

M939 – the vehicles were DEMIL Code A

M969A1 – was DEMIL Code A7

M973 – the M973 DEMIL Code history revealed the vehicle was Code A in 1982. In 2005 it was recommended the vehicle be DEMIL Code C but the Item Manager made it DEMIL Q. In

2008 it was again recommended the vehicle be Code C which it was changed to and remains currently. A 2008 note indicated when all key points have been removed this vehicle should be DEMIL Code Q.

M977 –the M977 DEMIL Code history revealed the M977 was cataloged DEMIL B in 1980 and changed to DEMIL Code Q6 in 2013 then DEMIL Code Q3 in 2016. The change to DEMIL C was made in 2017 and a change back to Q3 occurred in 2018.

M1070 – it was DEMIL Code A1

M1078 – the Light Utility Truck was DEMIL Code A1, which was under review at the time of this report.

DDCMO reviewed the MRAP Chassis and CAIMAN MTV Chassis and determined neither was Stock Listed and thus neither had a DEMIL Code.

High Mobility Multi Wheeled Vehicle's (HMMWV) reviewed by DDCMO are listed below in the following table:

Version	NSN all FSC 2320	DEMIL Code	Nomenclature
M998	011077155	(b) (5)	Cargo / Troop (Soft)
M998A1	013719577	(b) (5)	Cargo / Troop (Soft)
M1038	011077156	(b) (5)	Cargo / Troop with Winch (Soft)
M1038A1	013719578	(b) (5)	Cargo / Troop with Winch (Soft)
M1097	013469317	(b) (5)	Tall Cargo/Troop (Soft)
M1097A1	013719583	(b) (5)	Tall Cargo/Troop with Winch (Soft)
M1097A2	013808604	(b) (5)	Tall Cargo/Troop with Winch (Soft)
M1123	014559593	(b) (5)	Tall Cargo/Troop with Winch (Soft)
M1035	011467194	(b) (5)	Mini-Ambulance (Soft)
M1035A1	013719585	(b) (5)	Mini-Ambulance (Soft)
M1035A2	013808290	(b) (5)	Mini-Ambulance (Soft)
M1037	011467193	(b) (5)(b)	Shelter Carrier
M1042	011467187	(b) (5)	Shelter Carrier with Winch
M996	011112275	(b) (5)	Mini-Ambulance (Aluminum-Turtle Shell)
M996A1	013723935	(b) (5)	Mini-Ambulance (Aluminum-Turtle Shell)
M997	011112274	(b) (5)	Maxi-Ambulance (Aluminum-Turtle Shell)
M997A1	013723934	(b) (5)	Maxi-Ambulance (Aluminum-Turtle Shell)
M997A2	013808225	(b) (5)	Maxi-Ambulance (Aluminum-Turtle Shell)
M997A3	015953986	(b) (5)	Maxi-Ambulance (Enhanced Armament Carrier)
M1025	011289551	(b) (5)	Weapon Mounts (Aluminum-Turtle Shell)
M1025A1	013719584	(b) (5)	Weapon Mounts (Aluminum-Turtle Shell)
M1025A2	013808233	(b) (5)	Weapon Mounts (Aluminum-Turtle Shell)

M1026	011289552	(b) (5)	Weapon Mounts with Winch (Aluminum-Turtle Shell)
M1026A1	013719579	(b) (5)	Weapon Mounts with Winch (Aluminum-Turtle Shell)
M966	011077153	(b) (5)	TOW missile (Aluminum-Turtle Shell)
M966A1	013723932	(b) (5)	TOW missile (Aluminum-Turtle Shell)
M1043	011467190	(b) (5)	Supplemental Armor with Weapon Mount
M1043A1	013723933	(b) (5)	Supplemental Armor with Weapon Mount
M1043A2	013808213	(b) (5)	Supplemental Armor with Weapon Mount
M1044	011467189	(b) (5)	Supplemental Armor with Weapon Mount and Winch
M1044A1	013719581	(b) (5)	Supplemental Armor with Weapon Mount and Winch
M1045	011467191	(b) (5)	Supplemental armor, TOW missile
M1045A1	013719580	(b) (5)	Supplemental armor, TOW missile
M1045A2	013808229	(b) (5)	Supplemental armor, TOW missile
M1046	011467188	(b) (5)	Supplemental armor, TOW missile with Winch
M1046A1	013719582	(b) (5)	Supplemental armor, TOW missile with Winch
M1097	013469317	(b) (5)	Avenger Air-Defense Vehicle
M1109	013897558	(b) (5)	Up-Armored, Weapon Mounts, and Winch
M1113	014120143	(b) (5)	Up-Armored, Weapon Mounts, and Winch
M1114	014133739	(b) (5)	Up-Armored, Weapon Mounts, and Winch
M1116	014187400	(b) (5)	Enhanced Armament Carrier
M1151	015187330	(b) (5)	Enhanced Armament Carrier
M1151A1	015402038	(b) (5)	Enhanced Armament Carrier (Expanded)
M1152	015187332	(b) (5)	Enhanced Troop/Cargo
M1152A1	015402007	(b) (5)	Enhanced Troop/Cargo (Special Ops)
M1121	014561282	(b) (5)	Up-Armored, TOW missile
M1036	011077154	(b) (5)	Up-Armored, TOW missile with Winch
M1165	015631031	(b) (5)	Ground Sensor Surveillance Vehicle
M1165	015401993	(b) (5)	Ground Sensor Surveillance Vehicle
M1165A1	015402017	(b) (5)	Ground Sensor Surveillance Vehicle (Special Ops)
M1167	015449638	(b) (5)	Up-Armored, TOW missile with Winch

Research revealed prior to the 2013 Export Control Reform all HMMWV's were DEMIL C, meaning they required removal or demilitarization of installed key point(s). Once DEMIL required items or key points had been removed or destroyed the remaining material was either scrap or residual material that was evaluated to determine if it carried additional DEMIL or mutilation requirements.

The 2013 Export Control Reform resulted in the development of a "600" series ECCN that identified the item as military equipment. Items previously determined non-sensitive dual-use items (military and commercial use) were grouped with military or defense items under ECCN 0A606, which effectively changed the DEMIL code, and disposition instructions to MUT. Coordination with the DDPO revealed comingling of military unique and tactical vehicles with non-combat support vehicles complicated the assignment of appropriate DEMIL codes. On

January 29, 2015, the DDPM required use of the 9EAR6 marker for specific HMMWV variants, and later, on February 21, 2017, issued additional guidance regarding the use of 9EAR6 for items that could have potential use commercially to make these items available for public sale. 9EAR6 was a "work-around" code allowing some military items now grouped in the 600 series to continue to be sold. All rolling stock identified by place marker 9EAR6 were DEMIL Code Q6 items, indicating they were non-sensitive export controlled items, requiring DoD Trade Security Controls prior to being released from DoD control.

Prior to ECR, all HMMWV DEMIL codes were restricted. In 2014 and 2015 the DEMIL Working Group; the Service DEMIL Points of Contact; DLA Disposition Services; Environmental Protection Agency; Department of Transportation; Office of Secretary of Defense, Supply Chain Integration; Department of Commerce; and the Department of State considered which, if any, HMMWV's could be considered for sale with Trade Security Controls (normally, moving from DEMIL C or Q3 to DEMIL Q6. It was determined that HMMWV Models M998, M998A1, M1038, and M1038A1, could have an exception to DEMIL Code policy, making them Q6, due to the fact that they were not procured with key points such as armor and weapons mounts, and were comparable to commercial equivalents, posing limited risk if released out of DoD control, and allowing sale and donation within the U.S. and requiring mutilation outside the U.S. Attached as Exhibit 9 is the Department of Commerce Bureau of Industry and Security, Commodity Classification (CCATS), submitted via the Simplified Network Application Process Redesign (SNAP-R), detailing that HMMWV Models M998 and M1038 are classified under ECCN 0A606 of the CCL, and the DDPO Memorandum stating HMMWV's of Model M998, M998A1, M1038, and M1038A1 are DEMIL Code Q6 as Exhibit 10.

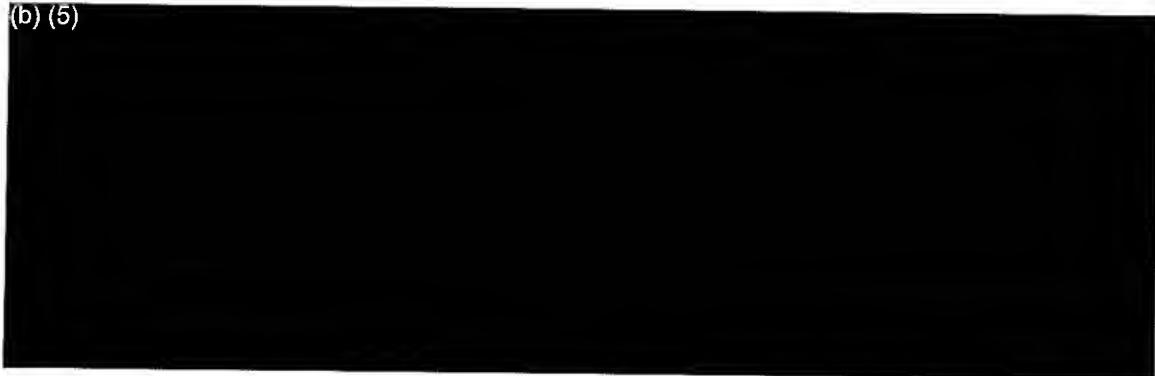
DoD Manual 4160.28, Volume 1, Defense Demilitarization: Program Administration, dated August 9, 2017, Change 1 Effective January 16, 2018, Paragraph 6.d. requires the Military Departments to assign accurate DEMIL codes to every item of DoD personal property for which each Military Department has management responsibility to include items for which logistic responsibility has been reassigned. DoD IG Audit Report No. DODIG-2015-031, dated November 7, 2014, reflected:

(b) (5)



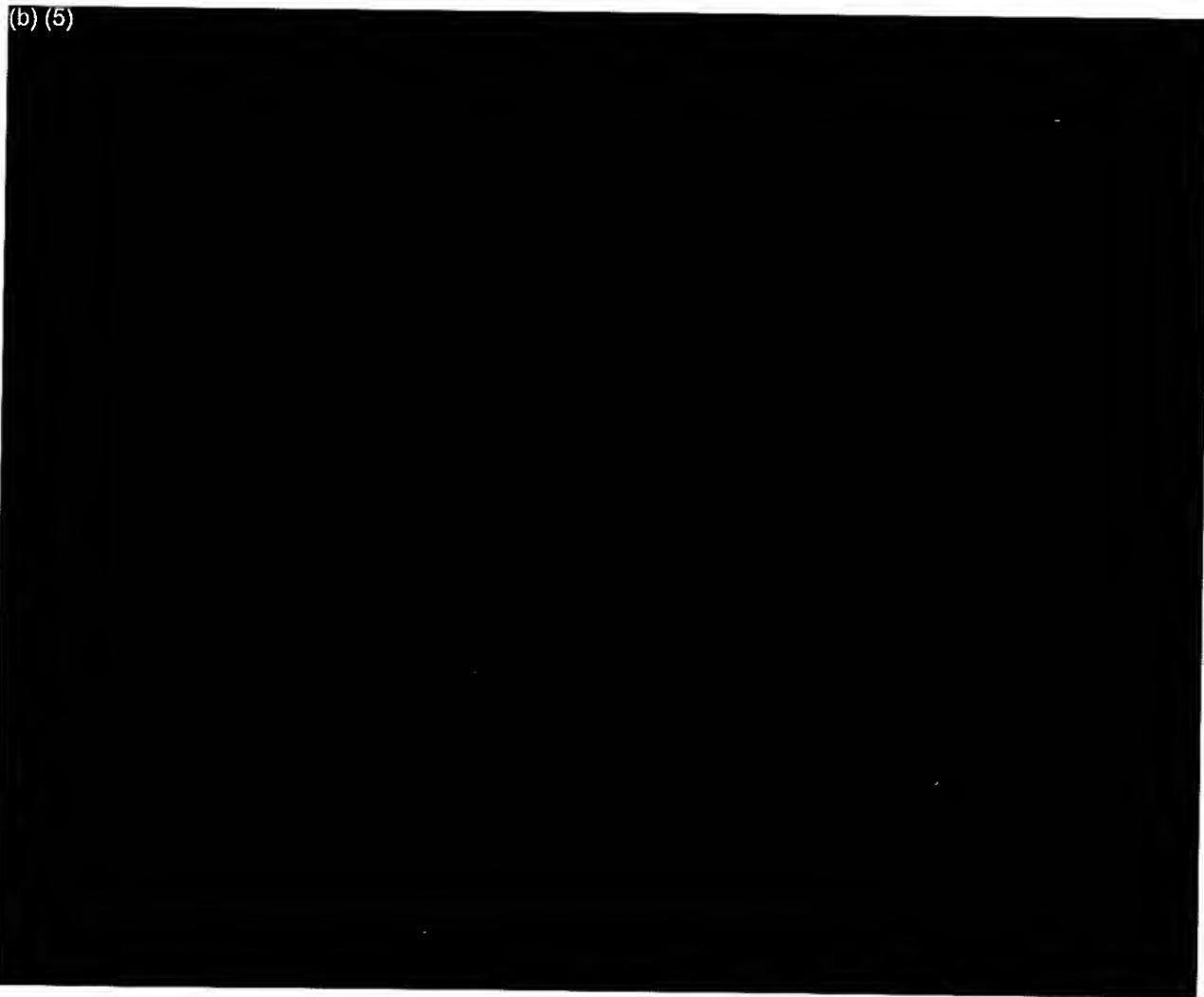
As a result of the changes that were from movement of some rolling stock from the USML to the CCL and also, that led to the establishment of the ECCN 9EAR6, in 2015 a Business Case Analysis was completed by DLA Disposition Services to determine the cost effectiveness of modifying DEMIL Coded "C" wheeled vehicles to result in a DEMIL Code Q6 and make them available for commercial sale. There were four proposed courses of action identified:

(b) (5)



There were risks identified and considered:

(b) (5)



(b) (5)



The conclusion of the BCA was that it would not be cost effective to convert additional rolling stock from DEMIL C to DEMIL Q6

COORDINATION WITH DLA GENERAL COUNSEL: This initiative report was reviewed by Mr. Mark Cremin on September 27, 2018, with no legal objection

STATUS: Recommend this initiative be closed. Copies of the instructions, now in draft, and SOP or manuals, if any, will be included in our files as evidence of action taken.

EXHIBIT(S):

- (1) DoD Instruction 4160.28, DoD Demilitarization (DEMIL) Program, dated April 7, 2011, Incorporating Change 1, September 14, 2017 (12 pages). (Original maintained by DoD, DLA)
- (2) DoD Manual 4160.28, Volume 1, Defense Demilitarization: Program Administration, dated August 9, 2017, Change 1 Effective January 16, 2018 (34 pages). (Original maintained by DoD, DLA)
- (3) DoD Instruction 2030.08, Implementation of Trade Security Controls (TSCs) for Transfers of DoD Personal Property to Parties Outside DoD Control, dated February 19, 2015, Incorporating Change 1, May 24, 2017 (16 pages). (Original maintained by DOD, DLA)
- (4) DLA Logistics Operations, Logistics Policy & Strategic Programs Executive Directorate (J34) Organization Chart, effective January 2018 (1 page). (Original location J3)
- (5) DoD Manual 4160.28, Volume 2, Defense Demilitarization: Demilitarization Coding, dated March 9, 2017, Change 1 Effective: December 1, 2017 (114 pages). (Original maintained by DOD, DLA)
- (6) DoD Manual 4160.28, Volume 3, Defense Demilitarization: Procedural Guidance, dated June 7, 2011, Incorporating Change 1, February 9, 2018 (61 pages). (Original maintained by DOD, DLA)
- (7) DoD Manual 4100.39, Federal Logistics Information System (FLIS) Procedures, dated March 8, 2017, Change 1 Effective October 5, 2017 with FLIS Volume 10 (541 pages). (Original location unknown)
- (8) Copy of DLA J3 General Orders, various dates (36 pages). (Original location DLA)
- (9) Department of Commerce Bureau of Industry and Security, Commodity Classification (CCATS), Case Number Z423086, dated September 9, 2014 (3 pages). (Original location Department of Commerce)
- (10) DDPO Guidance, Designation of HMMWV as Non-Sensitive, DEMIL Code Q6, dated January 29, 2015 (1 page). (Original location DLA)
- (11) DLA Disposition Services Business Case Analysis, various dates, (44 pages). (Original location DLA Disposition Services)

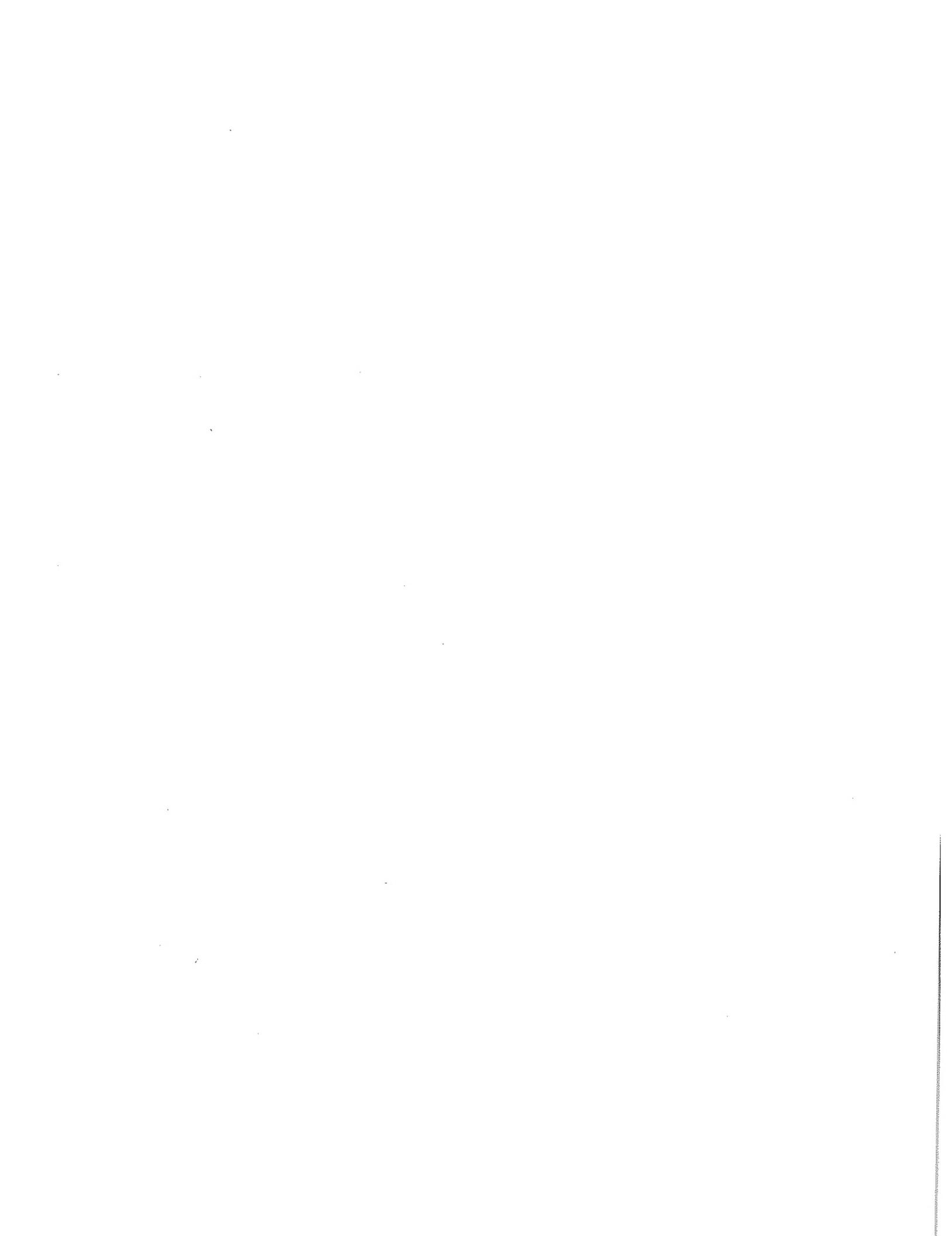
DISTRIBUTION:

Info - DLA Logistics Operations, Chief Disposal Policy (harry.nicholson@dla.mil)  
Info - DLA Disposition Services, Chief of Staff (peter.foreman@dla.mil)  
Info - DLA General Counsel, Chief Counsel (mark.cremin@dla.mil)  
Info - DLA Disposition Services General Counsel, Chief Counsel (stauffer.malcom@dla.mil)  
File

APPROVED FOR THE DLA INSPECTOR GENERAL:

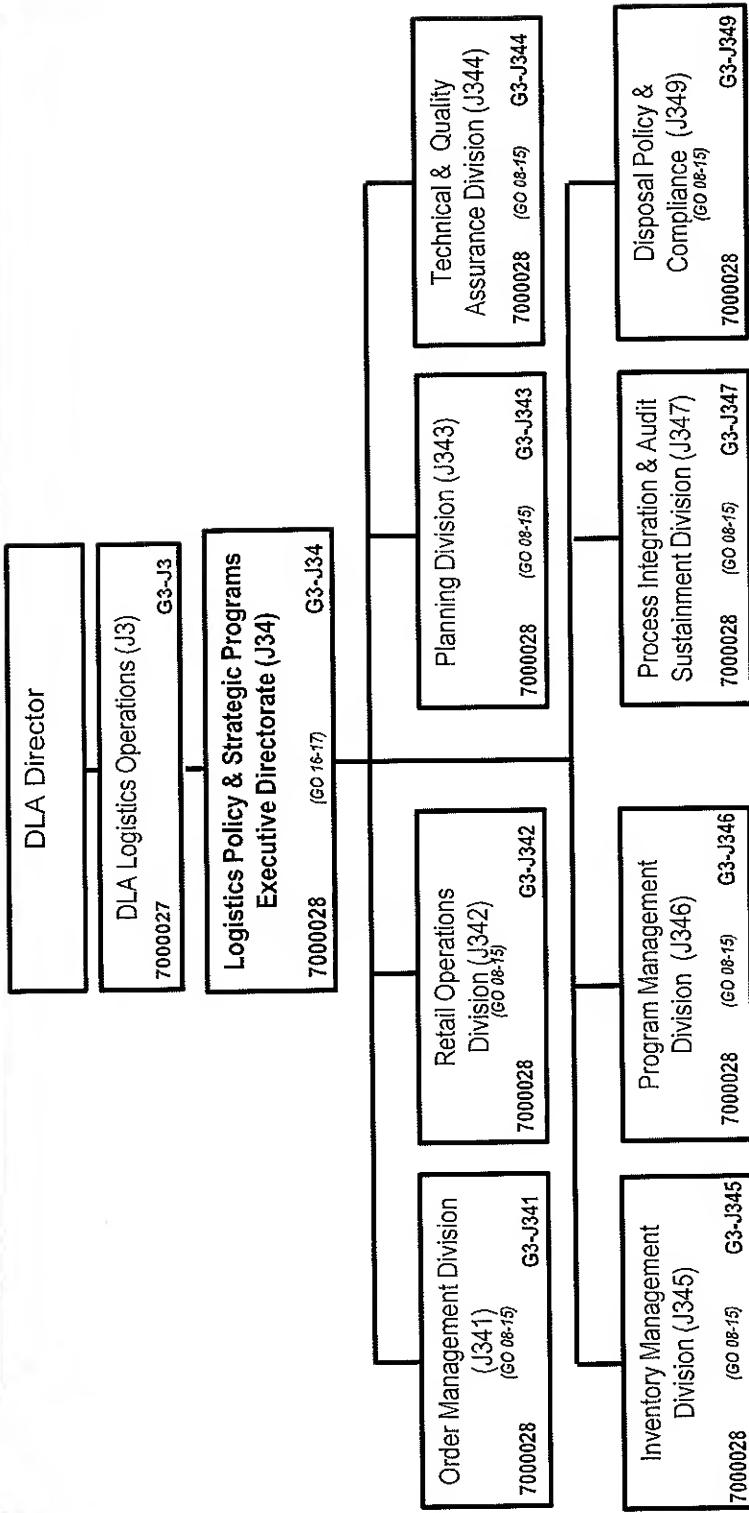
UNRUH,JEROLD.J      Digitally signed by  
OHN.1149387818      UNRUH,JEROLD.JOHN.11493878  
18      Date: 2018.09.28 18:44:58 -04'00'

JEROLD J. UNRUH  
Deputy IG, Investigations Division  
DLA Office of the Inspector General





# DLA Logistics Operations Logistics Policy & Strategic Programs Executive Directorate (J34)



Effective: January 2018  
GO Number 16-17

PRIVACY ACT - FOR OFFICIAL USE ONLY

Exhibit 4 - 1

[REDACTED] -INI-0005

# **DEMIL “C” Vehicle Sales**

## **Business Case Analysis (BCA)**

### **Director’s Brief**

(b) (6)  
[REDACTED]

Analytic Strategies, LLC

19 May 2015



# **Agenda**

2018-DLA-INI-0005

- Problem Statement
- Purpose / Selection Criteria
- Scope
- Assumptions
- Requirements and Constraints
- Alternatives
- Risk Assessment
- Recommendations
- Next Steps



# Problem Statement

2018-DLA-INI-0005

- Most High Mobility Multipurpose Wheeled Vehicle (HMMWVs) are mutilated and sold for scrap, yielding ~ \$0.07 - 0.09/pound.
- Conduct Business Case Analysis (BCA) to determine how DLA can:
  - Maximize revenue for DLA?
  - Minimize risk (unintended release, safety)?
  - Comply with Federal law and Department of Defense (DoD) regulations?

*Benefits versus risk and compliance*

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Exhibit 11 - 6



# Purpose / Selection Criteria

2013-DLA-INI-0005

- Determine the cost effectiveness of demilitarizing wheeled vehicles with DEMIL Code “C” to acceptable civilian specifications and making them available for commercial sale.
- Included: HMMWVs.
- Excluded: Heavy Expanded Mobility Tactical Truck (HEMTTs):
  - Army TACOM recapitalizes or sells all but damaged frames.
  - No projected excess through at least 2021.

*Based on Army TACOM disposition plans for wheeled vehicles*

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Exhibit 11-7

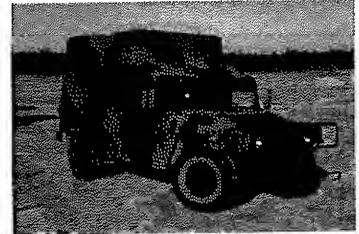
# Scope

- Conduct a BCA Level I to:
  - Identify and list key components of DEMIL Code “C” wheeled vehicles that must be removed to allow a change to DEMIL Code “Q”.
  - Determine potential financial costs/benefits of demilitarizing and Transferring/Donating or selling vehicles to the public.
  - Identify legal, policy, or procedural issues that must be addressed prior to selling vehicles to the public.
  - Identify potential risks and develop Risk Management Plan for mitigating them.
  - Identify next steps.

# Scope—Vehicle types



- Eligible HMMWV Types:
  - M1037 Shelter Carrier
  - M1097 Tall Cargo/Troop Carrier
  - M1113 Shelter Carrier
  
- Ineligible HMMWV Types:
  - Basic armor (M966, M1121, M1025, & M1026)
  - Up-armor (M1114, M1151, M1152, & M1165)



*Vehicle models mutually agreed upon by DLA DEMIL Office and DLA-DS I312.*

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# Scope: Projected HMMWV Turn-ins

Model	Nomenclature	DEMIL Code	Excess
M1037	Shelter Carrier	C/1	336
M1097A1	Tall Cargo/Troop with Winch (Soft)	C/7	1,358
M1097A2	Tall Cargo/Troop with Winch (Soft)	C/7	6,738
M1097R1	Tall Cargo/Troop with Winch (Soft)	C/7	32,289
M1113	Shelter Carrier	C/1	3,104
	Unarmored subtotal:		43,825
M1037P1	Shelter Carrier w/add-on armor	C/1	3
M1097A1P1	Tall Cargo/Troop with Winch (Soft) w/add-on armor	C/7	6
M1097A2P1	Tall Cargo/Troop with Winch (Soft) w/add-on armor	C/7	21
M1097P1	Tall Cargo/Troop with Winch (Soft) w/add-on armor	C/7	1
	Add On Armor subtotal:		31
M966	TOW missile (Aluminum-Turtle Shell)	C/1	91
M1025	Weapon Mounts (Aluminum-Turtle Shell)	C/1	1,133
M1025A1	Weapon Mounts (Aluminum-Turtle Shell)	C/1	1,721
M1025A2	Weapon Mounts (Aluminum-Turtle Shell)	C/1	395
M1025A2P1	Weapon Mounts (Aluminum-Turtle Shell) w/add-on armor	C/1	16
M1025P1	Weapon Mounts (Aluminum-Turtle Shell) w/add-on armor	C/1	51
M1026	Weapon Mounts with Winch (Aluminum-Turtle Shell)	C/1	549
M1026A1	Weapon Mounts with Winch (Aluminum-Turtle Shell)	C/1	405
M1026P1	Weapon Mounts with Winch (Aluminum-Turtle Shell) w/add-on armor	C/1	5
M1114	Up-Armored, Weapon Mounts, and Winch	C/1	1727
M1121	Up-Armored, TOW missile	C/1	420
M1151	Enhanced Armament Carrier	C/1	131
M1151A1	Enhanced Armament Carrier (Expanded)	C/1	2861
M1151P1	Enhanced Armament Carrier w/add-on armor	C/1	278
M1152	Enhanced Troop/Cargo	C/7	1039
M1152P1	Enhanced Troop/Cargo w/add-on armor	C/7	64
M1165	Ground Sensor Surveillance Vehicle	C/1	79
	Integral armor subtotal:		10,965
	PRIVACY ACT - FOR OFFICIAL USE ONLY Grand Total:		54,790



# Assumptions - General

2018-DLA-INI-0005

- Approximately one third of eligible vehicles will be Reutilized, Transferred, or Donated (RTD).
- Sales through Contractor using Iron Planet model.
- Military services or contractor will remove key points prior to RTD and sale (depending on alternative chosen).
- Disposition Services will verify proper DEMIL was conducted.
- Estimates of effort to DEMIL based on Technical Manual 9-2320-283-20-3 and/or Subject Matter Expert advice.
- Sales price will average \$7K / HMMWV.

Average sales price based on current sales trends

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Exhibit 11 - 11



# Requirements and Constraints

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2 FEB 2011 NI-0005

- US Army TACOM adamantly opposes HMMWV sales.
- Manufacturer (AM General) also strongly opposes HMMWV sales.
- Requires addition of DEMIL performed code to individual receipts to indicate DEMIL accomplished.
- Vehicles must go through RTD process when DEMIL Code changes occur after key points are demilitarized.
- Existing mutilation contracts guarantee contractors minimum amount of scrap.
- Sales Office (J4) may require additional resources to execute any new contracting actions.
- HMMWVs cannot be registered for on-road use.

*Numerous policy and administrative hurdles exist*

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Exhibit 11-12



# Alternative 1

2018-DLA-INI-0005

Continue to DEMIL all DEMIL Code “C” wheeled vehicles turned in to Disposition Services.

- Cost: No additional costs.
- Pros:
  - No change to existing policies or procedures.
  - Risks are minimal.
  - M1097 nets DLA approximately \$900.
  - Favored by US Army TACOM.
- Cons: Lost opportunity in revenue and higher Service level bill.
- External considerations: No change.
- Time to implement: Immediately.

**Status quo**

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Exhibit 11 - 13



## Alternative 2

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2018-DLA-INI-0005

Military services perform DEMIL of all eligible DEMIL Code "C" wheeled vehicles (M1037, M1097, & M1113 without Add On Armor); Disposition Services offers them for RTD and sale through the existing contract.

- Cost: May require additional support in the field if volumes are high.
- Pros:
  - Increased Transfer/Donation.
  - Net Disposition Services revenue of \$5.3K / vehicle.
  - Avoidance of transportation costs (\$250 - \$1,000 / vehicle).
- Cons: Military services would have additional work.

*Status quo + 3 vehicle models*

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Exhibit 11 - 14



## Alternative 2 (continued)

2018-DIA-INI-0005

- External considerations: Requires coordination and cooperation of DEMIL Code change with Army G4 / TACOM / DoD DEMIL Office and approval by Departments of Commerce/State.
- Time to implement: Immediately upon verification of DEMIL Code change and approval by Department of Commerce and Department of State.

***Status quo + 3 vehicle models***

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Exhibit 11 - 15

12



## Alternative 2 - Calculations

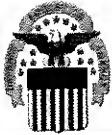
18-DLA-INI-0005

Model	Nomenclature	Vehicles	DEMIL	Expected	DLA	Total DLA Revenue
		Available	Labor Hours	Sale Price /Vehicle	Revenue /Vehicle	
M1037	Shelter Carrier	336	227	2.7	\$5,270	\$1,195,304
M1097A1	Tall Cargo/Troop with Winch (Soft)	1,358	917	0.7	\$5,270	\$4,831,020
M1097A2	Tall Cargo/Troop with Winch (Soft)	6,738	4,548	0.7	\$5,270	\$23,970,115
M1097R1	Tall Cargo/Troop with Winch (Soft)	32,289	21,795	0.7	\$5,270	\$114,866,584
M1113	Shelter Carrier	3,104	2,095	2.7	\$5,270	\$11,042,333
Totals:		43,825	29,582			155,905,356

**DLA revenue reflects that an estimated 32.5% of vehicles are anticipated to be claimed in mandatory RTD cycle. Actual turn-in numbers may vary.**

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Exhibit 11-16



## Alternative 3

2018-DLA-INI-0005

Transport eligible DEMIL Code “C” wheeled vehicles to one of three regional facilities established for contractor to perform DEMIL; offer them for RTD and public sale through a new contract.

- Cost: Same as Alternative 2, with some added costs.
  - Transportation: \$250 - \$1,000/vehicle.
  - Staffing: \$300K+ per site annually plus time and cost of training.
  - Contractor: To be determined by bid process.
- Pros:
  - Net Disposition Services revenue of \$4.5K / vehicle.
  - Increased transfer and donation.
  - Better control of DEMIL process.

**Similar to Alternative 2 but with DEMIL performed by Contractor at central locations**

14



## Alternative 3 (continued)

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2018-DLA-INI-0005

- Cons: Increased operating costs.
- External considerations: Same as Alternative 2.
- Time to implement: Nine months or more based on Sales Office (J4) workload. Will require new contract (sales or service) & establishment of regional sites.

***Similar to Alternative 2 but with DEMIL performed by Contractor at central locations***

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EXCLUDED FROM

15



## Alternative 3 - Calculations

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18-DLA-INI-0005

Model	Nomenclature	Vehicles		DEMIL	Expected	Gross DLA		DLA Revenue	Total Gross
		Vehicles	Available	Labor	Sale Price	Revenue /Vehicle	Transportation /Vehicle		
M1037	Shelter Carrier	336	227	2.7	\$7,000	\$5,270	(\$750)	\$4,520	\$1,025,204
M1097A1	Tall Cargo/Troop with Winch (Soft)	1,358	917	0.7	\$7,000	\$5,270	(\$750)	\$4,520	\$4,143,533
M1097A2	Tall Cargo/Troop with Winch (Soft)	6,738	4,548	0.7	\$7,000	\$5,270	(\$750)	\$4,520	\$20,559,002
M1097R1	Tall Cargo/Troop with Winch (Soft)	32,289	21,795	0.7	\$7,000	\$5,270	(\$750)	\$4,520	\$98,520,278
M1113	Shelter Carrier	3,104	2,095	2.7	\$7,000	\$5,270	(\$750)	\$4,520	\$9,470,933
Totals:		43,825	29,582						Total: \$133,718,950
Staffing (6 years): (\$5,400,000)									
Net DLA Revenue: \$128,318,950									

***Calculations do not take into account probable increased contractor  
share of sales due to increased labor requirements***

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Exhibit 11 - 19



## Alternative 4

2018-DLA-INI-0005

Offer DEMIL as Condition of Sale (DCOS) contracts that allow Buyers to dismantle Code "C" wheeled vehicles and remove and sell major components.

- Cost: Potential additional support in the field if volumes are high.
- Pros: Higher bids by scrap buyers, determined by bid process.
- Cons: Potential risk of unintended releases.
- External considerations: None.

*New way of doing business; difficult to quantify*

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Exhibit 11 - 20

17



## Alternative 4 (continued)

2018-DLA-INI-0005

- Time to implement: Incrementally implemented as current contracts expire or are terminated.
  - Anniston, AL: currently up for bid under Scrap Venture initiative.
  - Crane, IN: contract minimum has been met (DLA managed).
  - Red River, TX: contract minimum has been met (Scrap Venture managed).

*Difficult to quantify because it's only been done on a limited basis*

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Exhibit 11 - 21



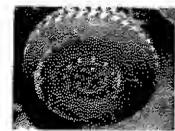
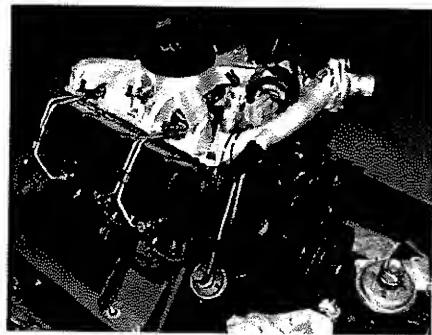
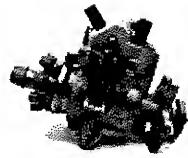
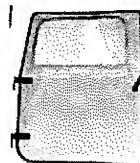
## Alternative 4 – Benefits

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2018-DLA-INI-0005

Buyers would have incentive to bid more for DEMIL contracts if they could sell non-DEMIL required parts:

- Hard top
- Engine
- Winch
- Alternator
- Fuel pump
- Tailgate
- Tires
- Rims
- Doors
- Seats
- Windshield frame



***DLA revenue would come in the form of higher bids from Buyers for scrap contracts***

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EXHIBIT H-22

19



# Risk Assessment

PRIVACY ACT INFORMATION

2018-DLA-INI-0005

Type of Risk	Impact (1 - 5)	Likelihood of		Risk	Risk Reduction Measure
		Occurrence (1 - 5)	Score (Impact x Likelihood)		
Sale price drop	2	3	6	Low	Control
Manufacturer opposition	2	5	10	Medium	Accept
TACOM opposition	4	5	20	High	Accept
Fewer vehicles than expected	2	3	6	Low	Accept
Unexpected modifications	4	5	20	High	Control
Safety/liability	2	4	8	Low	Transfer
Release of prohibited items	4	4	16	Medium	Control

**Risk: 1 - 8 = Low; 9 - 16 = Medium; 17 - 25 = High**

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Exhibit 11-23

- Eligible vehicle types without AOA: DEMIL & RTD / sales.
- Eligible vehicle types with AOA or ineligible vehicle types: Reutilize or send to DCOS contractor.

***Recommendations are a flexible combination of Alternatives 2 & 4***

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Exhibit 11 - 24

21



# Recommendations (Eligible)

18 DLA-INI-0005

Model	Nomenclature	Vehicles Available For		Net DLA Revenue		Total Revenue
		Excess	Sale	/Vehicle	Recommendation	
M1037	Shelter Carrier	336	227	\$5,270	DEMIL and RTD/sell	\$1,195,304
M1097A1	Tall Cargo/Troop with Winch (Soft)	1,358	917	\$5,270	DEMIL and RTD/sell	\$4,831,020
M1097A2	Tall Cargo/Troop with Winch (Soft)	6,738	4,548	\$5,270	DEMIL and RTD/sell	\$23,970,115
M1097R1	Tall Cargo/Troop with Winch (Soft)	32,289	21,795	\$5,270	DEMIL and RTD/sell	\$114,866,584
M1113	Shelter Carrier	3,104	2,095	\$5,270	DEMIL and RTD/sell	\$11,042,333
Totals:		43,825	29,582			\$155,905,356

**Total revenue realized over several years (through 2021)**

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Exhibit 11-25



# Recommendations (Ineligible)

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DODDLI-INI-0005

Model	Nomenclature	Vehicles		Net DLA Revenue /Vehicle	Recommendation
		Vehicles Available For Excess	Sale		
M1037P1	Shelter Carrier w/AOA	3	2	Variable	DCOS Vendor
M1097P1	Tall Cargo/Troop with Winch (Soft) w/AOA	1	1	Variable	DCOS Vendor
M1097A1P1	Tall Cargo/Troop with Winch (Soft) w/AOA	6	4	Variable	DCOS Vendor
M1097A2P1	Tall Cargo/Troop with Winch (Soft) w/AOA	21	14	Variable	DCOS Vendor
M1025	Weapon Mounts (Aluminum-Turtle Shell)	1,133	765	Variable	DCOS Vendor
M1025P1	Weapon Mounts (Aluminum-Turtle Shell) w/AOA	51	34	Variable	DCOS Vendor
M1025A1	Weapon Mounts (Aluminum-Turtle Shell)	1,721	1,162	Variable	DCOS Vendor
M1025A2	Weapon Mounts (Aluminum-Turtle Shell)	395	267	Variable	DCOS Vendor
M1025A2P1	Weapon Mounts (Aluminum-Turtle Shell) w/AOA	16	11	Variable	DCOS Vendor
M1026	Weapon Mounts with Winch (Aluminum-Turtle Shell)	549	371	Variable	DCOS Vendor
M1026P1	Weapon Mounts with Winch (Aluminum-Turtle Shell)	5	3	Variable	DCOS Vendor
M1026A1	Weapon Mounts with Winch (Aluminum-Turtle Shell)	405	273	Variable	DCOS Vendor
M1121	Up-Armored, TOW missile	420	284	Variable	DCOS Vendor
M966	TOW missile (Aluminum-Turtle Shell)	91	61	Variable	DCOS Vendor
M1114	Up-Armored, Weapon Mounts, and Winch	1727	1,166	Variable	DCOS Vendor
M1151	Enhanced Armament Carrier	131	88	Variable	DCOS Vendor
M1151P1	Enhanced Armament Carrier w/add-on armor	278	188	Variable	DCOS Vendor
M1151A1	Enhanced Armament Carrier (Expanded)	2861	1,931	Variable	DCOS Vendor
M1152	Enhanced Troop/Cargo	1039	701	Variable	DCOS Vendor
M1152P1	Enhanced Troop/Cargo w/add-on armor	64	43	Variable	DCOS Vendor
M1165	Ground Sensor Surveillance Vehicle	79	53	Variable	DCOS Vendor
Totals:		10,996	7,422		

**Ineligible for sales because of armor but contain usable parts**

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Exhibit 11 - 26



# Next Steps

2018-DLA-INI-0005

- Obtain Director's guidance on which alternative(s) to pursue.
- Review Departments of State/Commerce opinions on specified vehicles. DLA J3 requested answer within 90 days (J3 action, S: 22 July 2015).
- Communicate intent and initiate negotiations with Army G4, TACOM, and DoD DEMIL Office (Joint J3 & J4 action, immediate).
  - Ensure proper DEMIL upon turn-in.
  - Change DEMIL Code of specified vehicles from "C" to "Q".
  - Stand by to implement Alternative 3 if negotiations fail.
- Incrementally implement DCOS contracts as current contracts expire or are terminated (J4 action, immediate).
- Project team to monitor progress and report to Director (J4 lead with J3 support, immediate).



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2018-DLA-INI-0005

# Questions?

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Exhibit 11 - 28

25

-INI-0005



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26

Exhibit 11 - 29

# DEMIL Code “C” Vehicle Sales Business Case Analysis

**Project Title:** DEMIL Code “C” Wheeled Vehicle Sales

**Date:** 19 May 2015

**Point of Contact:** (b) (5), Analytic Strategies LLC, (b) (5) @dla.mil, (b) (5)

## Initiative Category (check)

- Information Technology Requirements
- Non-ADP Equipment
- Minor Construction/MILCON (submit DD form 1391 only)
- Other Capital
- Business Initiative

## 1.0. Problem Identification

Under current disposition policy, most excess military vehicles are demilitarized and sold for scrap, incurring significant costs and recovering only a fraction of their potential value. However, beginning in December 2014 limited public sales of certain models of High Mobility Multipurpose Wheeled Vehicles (HMMWV) attracted considerable interest and generated average sales of nearly \$30K per vehicle (in contrast to an acquisition cost of \$41K).

The models of HMMWV sold were the most basic models – the M998 & M1038, without armor or weapons components – and were designated DEMIL Code “Q”. In order to sell surplus vehicles designated DEMIL Code “C” – which includes most other models of HMMWV – to the public there are a number of hurdles that must be overcome. The Department of Defense Demilitarization/Trade Security Controls Program Office, in coordination with the Department of State and Department of Commerce, must issue policy declaring the vehicles eligible for public sale. The vehicles must be demilitarized by removing key points: armor, weapons components, communications equipment, active protection systems, etc. (see Appendix A for a complete list). Finally, measures to facilitate sales while limiting risk to DLA and the US Government must be established.

## 2.0. Purpose of the Initiative and Selection Criteria

The purpose of this study is to determine the cost effectiveness of demilitarizing wheeled vehicles with DEMIL Code “C” to acceptable civilian specifications and making them available for commercial sale. Vehicles meeting this description include High Mobility Multipurpose Wheeled Vehicles (HMMWV) and Heavy Expanded Mobility Tactical Trucks (HEMTT).<sup>1</sup> However, since US Army Tank-automotive and Armaments Command (TACOM) indicated that HEMMTs are not being turned in to Disposition Services unless their frames are so badly damaged they can't be rebuilt, they were excluded from the study. All excess HEMTTs are being recapitalized and there is no projected excess through at least 2021, especially now that the HEMTT has been approved for Foreign Military Sales.<sup>2</sup>

<sup>1</sup> In an email dated 24 Feb 2015 Mr. Laurence Norvey, Chief, Verification Branch (J312), DLA Disposition Services, indicated that the HEMTT and HMMWV are the only DEMIL Code “C” wheeled vehicles that would fall under the scope of this BCA. Other DEMIL Code “C” wheeled vehicles in the inventory are modified for combat operations (e.g., Fox NBC Vehicle or Marine Corps LAV).

<sup>2</sup> Telephone conversation 20 Feb 2015 with Ms. Norma Schuetz, System Acquisition Manager for HEMTT & PLS RECAP, US Army TACOM, (586) 282-8508, [norma.r.schuetz.civ@mail.mil](mailto:norma.r.schuetz.civ@mail.mil).

### 3.0 Scope

Conduct a BCA Level I to:

- Identify and list key components for DEMIL "C" wheeled vehicles in order that prohibited components can be removed, allowing the DEMIL Code to be changed to "Q"
- Determine potential financial costs/benefits of demilitarizing and selling vehicles to the public
- Identify legal, policy, or procedural issues that must be addressed prior to selling vehicles to the public
- Identify potential risks and develop Risk Management Plan for mitigating them
- Identify next steps

### 4.0. Assumptions

**Vehicle Turn-ins:** The following DEMIL Code "C" wheeled vehicles (all HMMWV variants) are tentatively forecast by US Army TACOM to be turned in as excess by 2021<sup>3</sup>:

Model	Nomenclature	DEMIL Code	Excess
M1037	Shelter Carrier	C/1	336
M1097A1	Tall Cargo/Troop with Winch (Soft)	C/7	1,358
M1097A2	Tall Cargo/Troop with Winch (Soft)	C/7	6,738
M1097R1	Tall Cargo/Troop with Winch (Soft)	C/7	32,289
M1113	Shelter Carrier	C/1	3,104
<b>Unarmored subtotal:</b>			<b>43,825</b>
M1037P1	Shelter Carrier w/add-on armor	C/1	3
M1097A1P1	Tall Cargo/Troop with Winch (Soft) w/add-on armor	C/7	6
M1097A2P1	Tall Cargo/Troop with Winch (Soft) w/add-on armor	C/7	21
M1097P1	Tall Cargo/Troop with Winch (Soft) w/add-on armor	C/7	1
<b>Add On Armor subtotal:</b>			<b>31</b>
M966	TOW missile (Aluminum-Turtle Shell)	C/1	91
M1025	Weapon Mounts (Aluminum-Turtle Shell)	C/1	1,133
M1025A1	Weapon Mounts (Aluminum-Turtle Shell)	C/1	1,721
M1025A2	Weapon Mounts (Aluminum-Turtle Shell)	C/1	395
M1025A2P1	Weapon Mounts (Aluminum-Turtle Shell) w/add-on armor	C/1	16
M1025P1	Weapon Mounts (Aluminum-Turtle Shell) w/add-on armor	C/1	51
M1026	Weapon Mounts with Winch (Aluminum-Turtle Shell)	C/1	549
M1026A1	Weapon Mounts with Winch (Aluminum-Turtle Shell)	C/1	405
M1026P1	Weapon Mounts with Winch (Aluminum-Turtle Shell) w/add-on armor	C/1	5
M1114	Up-Armored, Weapon Mounts, and Winch	C/1	1727
M1121	Up-Armored, TOW missile	C/1	420
M1151	Enhanced Armament Carrier	C/1	131
M1151A1	Enhanced Armament Carrier (Expanded)	C/1	2861

<sup>3</sup> Email dated 23 Feb 2015 from (b) (5) [REDACTED] Light Tactical Vehicles, US Army TACOM, AMSTA-LCC-HL, (b) (5) [REDACTED] .civ@mail.mil. (b) (5) [REDACTED] emphasized that while this data is the best available current estimate, a final decision on HMMWV numbers has not yet been made.

M1151P1	Enhanced Armament Carrier w/add-on armor	C/1	278
M1152	Enhanced Troop/Cargo	C/7	1039
M1152P1	Enhanced Troop/Cargo w/add-on armor	C/7	64
M1165	Ground Sensor Surveillance Vehicle	C/1	79
<b>Integral armor subtotal:</b>			<b>10,965</b>
<b>Grand Total:</b>			<b>54,790</b>

Figure 1: HMWV Turn-ins, 2015-2021

**Eligible Vehicle Types:** HMMWV models with basic armor (M966, M1121, M1025, & M1026) or up-armor (M1114, M1151, M1152, & M1165) cannot be effectively demilitarized because the armor is an integral part of the vehicle structure itself.<sup>4</sup> Models without integral armor (M1037, M1097, & M1113), however, can be effectively demilitarized for public use.<sup>5</sup> Add On Armor (AOA) applied to an otherwise eligible vehicle can be removed and does not prevent a vehicle from being demilitarized, although there is a significant additional labor requirement. Non-key components of all HMMWV models can be sold individually.

**Contractor Sales:** Potential sales of DEMIL Code "C" wheeled vehicles would be conducted under an arrangement similar to the current contract with Iron Planet, in which DLA receives 75.29% of realized sale prices. More than 500 M998 and M1038 HMMWVs have been sold by Iron Planet, averaging around \$14K per vehicle over the last three quarters, or about \$10.5K each in revenue for DLA.<sup>6</sup> The contractor is responsible for inspecting vehicles, prepping them for sale, photographing and describing them for auction listings, and conducting the sales. Vehicles are usually sold on site but in cases where they need to be transported to a new location the contractor bears this cost as well. Vehicles are sold without title, for off-road use only, with no guarantees.

**Cost Baseline:** Most of the costs of a contractor-run sales program would be similar to the current contractor-run sales program: transportation, storage, security, etc. If DLA Disposition Services decides to centralize sales to a handful of regional locations (discussed in greater detail later in this BCA) there will be additional costs, primarily transportation and personnel.

**Responsibility for Removing Key Points:** Key points will be removed by the military services or by the contractor, depending upon the alternative chosen. Most of the eligible vehicles described above should not require extensive DEMIL, approximately 1-3 hours labor for vehicles without AOA. The much smaller number of vehicles with AOA – if the decision is made to DEMIL them – will take longer, approximately 60-70 hours each.<sup>7</sup> The contractor will perform any additional work needed to prepare vehicles for auction, as well as providing transportation to the auction site (if necessary). DLA Disposition Services is responsible for certifying vehicles as having key points properly removed.

**Sales Price:** The average auction sales price of HMMWVs will remain steady at between \$6-8K per vehicle. Sales over the past three quarters have averaged around \$14K but there has been a

<sup>4</sup> Email dated 1 Mar 2015 from (b) (5) Verification Branch (J312), DLA Disposition Services (b) (5) (@dla.mil. (b) (5)) stated that the DEMIL instructions in DOD Manual 4160.28-M Volume 3, require total destruction including cutting the frame into pieces.

<sup>5</sup> (b) (5), DOD Demilitarization Program Manager, DLA J33, submitted a Simplified Network Application Process Redesign (SNAP-R) to the Department of Commerce on 23 April 2015 to verify that they have no issue with the sale of these three HMMWV models. He anticipates an answer within 30-90 days.

<sup>6</sup> Email dated 22 Apr 2015 from (b) (5), Sales Branch (J422), DLA Disposition Services, (b) (5) (@dla.mil.)

Time estimates for various DEMIL procedures are drawn wherever possible from the Maintenance Allocation Chart (MAC) in TM-9-2320-283-20-3 using the assumption that the time required to remove a part is equal to 2/3 of the time allocated to replacing it. For procedures not covered by the TM estimates were drawn from interviews with subject matter experts in performing the operation.

downward trend as the initial consumer demand has been filled. However, we believe prices will stabilize at a level that reflects the commercial utility of the vehicles.

**Reutilization, Transfer, and Donation (RTD):** Approximately one third of vehicles eligible for sale will be diverted by the RTD process prior to auction.<sup>8</sup>

## 5.0. Requirements and Constraints

**Disposition Approval:** Under Department of Defense regulations the secretaries of the military departments assign DEMIL codes to items for which they have management responsibility. US Army TACOM assigns DEMIL Codes to HMMWVs under the authority of the Secretary of the Army. Vehicles assigned DEMIL Code "C" -- those within scope of this BCA -- have designated "key points" that must be removed or demilitarized prior to disposition; the residual portion may then be processed as DEMIL Code "Q".<sup>9</sup>

Despite the fact that DoD regulations authorize the public sale of most HMMWVs after demilitarization, TACOM strongly opposes such a move and requests that all HMMWVs turned in to DLA Disposition Services be mutilated to prevent reuse. One TACOM official stated:

*In the case of the HMMWV, we have provided DLA Disposition Services with the proper handling procedures for the HMMWV and advised that the HMMWV is not to be sold to the public. In the past, we have had to recover vehicles from the public that were obtained without the authorization of this Command. . . There are a host of reasons that the HMMWV is not to be made available to the public that range from safety issues and the related US Government Liability to the environmental considerations.*

- *There are serious roll-over risks associated with untrained vehicle operators. Unlike the commercially available Hummer, the HMMWV was never designed for use by the public.*
- *The US Army is required to obtain waivers from the EPA to continue to utilize this vehicle because the HMMWV does not meet the EPA regulations. Those waivers, when granted, do not apply to the public use of the HMMWV vehicle.*
- *Over the years, numerous petitions to Congressional Leaders have been made by their constituents to obtain the HMMWV for parades, static displays and museums. Through the formal Congressional Inquiry process, we consistently advise the Congressman or Congresswoman that we must deny the request for the same reasons as outlined above.<sup>10</sup>*

The Departments of Commerce and State must also agree that the equipment in question is approved for sale to the public and determine whether there are any additional export controls.

**Titling:** HMMWVs do not meet basic Department of Transportation or Environmental Protection Agency requirements to operate on public roads; therefore they must be sold for off-road use only. State laws vary but in most cases it is impossible to subsequently register the vehicles for use on

<sup>8</sup> Analysis of data contained in email dated 29 Apr 2015 from (b) (5) RTD Branch, DLA Disposition Services, (b) (5) @dla.mil and email dated 11 May 2015 from (b) (5) (b) (5) Army Support Branch (J41), DLA Disposition Services, (b) (5) , (b) (5) @dla.mil.

<sup>9</sup> DoD Manual 4160.28-M-Volume 2 dated June 7, 2011, Enclosure 2 (Responsibilities), para. 2; Enclosure 5 (Supplementary Information Related to Demil Codes), para. 5.

<sup>10</sup> Email dated 13 Feb 2015 from (b) (5) Group Leader, Light Tactical Vehicles, US Army TACOM, (b) (5) , (b) (5) @mail.mil.

public roads. This limits potential sales to off-road and military vehicle enthusiasts and to farm or industrial users.

**Reutilization, Transfer, and Donation (RTD):** Under current regulations, once items are demilitarized and the DEMIL Code is changed to "Q", they must be reported to the General Services Administration (GSA) for RTD screening by federal agencies, authorized nonfederal recipients, and surplus (state and local) customers. Between 1 October 2014 and 21 April 2015 there have been 890 M998s & M1038s RTD'd and another 88 ordered but not yet shipped. Vehicles ordered or shipped as of 21 April 2015 include<sup>11</sup>:

Customer	Number	Percentage
Reutilization	622	64%
Transfer	51	5%
Donation	305	31%
<b>Total:</b>	<b>978</b>	<b>100%</b>

Figure 2: HMMWV RTD Orders and Shipments, 1 Oct 2014 – 21 Apr 2015

HMMWVs are in great demand by RTD customers and we can expect that many of the vehicles projected excess by US Army TACOM will be diverted from any potential sales program. Costs, including transportation and DEMIL, may be passed along to Donation (state and local) customers but not to Transfer (Federal civil agency) customers. To date, Donations have accounted for 30% (267 out of 890) of HMMWVs RTD'd, while Transfers have accounted for only 5%.

**Existing DEMIL as Condition of Sale (DCOS) Contracts:** Current contracts with vendors mutilating HMMWVs guarantee the vendors a minimum amount of scrap material. DLA Disposition Services would be obligated to pay the contractors a penalty if these minimums are not met. The three existing DCOS contracts (Anniston, Crane, & Red River) have already met the minimums, but one of these is in the process of being reoffered.<sup>12</sup>

## 6.0. Description of Alternatives

**Alternative 1:** Continue to DEMIL all DEMIL Code "C" wheeled vehicles turned in to DLA Disposition Services.

**Cost:** This alternative does not incur any additional costs.

**Pros:** This is the approach favored by US Army TACOM, the proponent command for the vehicles. It requires no change to existing policies or procedures and has no impact on existing contracts. Risks are minimal. For purposes of comparison, the current DEMIL as a Condition of Sale (DCOS) contract in place at Anniston Army Depot nets DLA Disposition Services \$0.09/pound<sup>13</sup>, or approximately \$900 for a M1037.

**Cons:** Potential loss of revenue and higher Service level bill.

**External considerations:** None.

<sup>11</sup> Email dated 29 Apr 2015 from (b) (5) [REDACTED] RTD Branch, DLA Disposition Services, (b) (5) [REDACTED] @dla.mil. Transfer and Donation customers were not eligible to submit orders for these items until November 6th 2014.

<sup>12</sup> Email dated 7 May 2015 from (b) (5) [REDACTED] Disposition Support Division (J42), DLA Disposition Services, (b) (5) [REDACTED], (b) (5) [REDACTED] @dla.mil.

<sup>13</sup> Email dated 15 Apr 2015 from (b) (5) [REDACTED], (b) (5) [REDACTED] (b) (5) [REDACTED] Disposition Support Division (J42), DLA Disposition Services, (b) (5) [REDACTED], (b) (5) [REDACTED] @dla.mil. The contract rates at Crane and Red River are similar.

Time to implement: Immediately; status quo.

**Alternative 2:** Military services perform DEMIL of all eligible DEMIL Code "C" wheeled vehicles (M1037, M1097, & M1113 without Add On Armor) upon turn-in; Disposition Services offers them for RTD and public sale through the existing contract.

Cost: This alternative may potentially require additional support in the field if volumes are high.

Pros: Assuming an average auction sale price of \$7,000, DLA's net revenue per vehicle after subtracting the contractor's fee would be approximately \$5.3K. The easiest models to DEMIL are the M1097R1, M1097A1, and M1097A2 tall cargo/troop carriers, of which there are more than 40,000 forecast as excess. There are also 336 M1037 and 3,104 M1113 shelter carriers which are nearly as easy to DEMIL. All of these models are very similar to the M998 and M1038 vehicles already being sold, just with a higher payload capacity, and should be just as easy to DEMIL. This alternative would also promote increased Transfer and Donation of excess vehicles, a benefit to Federal, state, and local agencies, and avoid transportation costs of \$250 - \$1,000 per vehicle to one of the existing DEMIL contractors.

The P1 variants (AOA installed) of these three vehicles are the least profitable because they require the most labor to DEMIL<sup>14</sup>; however, there are only 31 of them forecast as excess. Vehicles with AOA or other labor-intensive modifications could be mutilated per the current model or disassembled for parts as described in Alternative 4 below. This would serve to minimize the risk of inadvertently releasing a vehicle with armor installed.

Having the Services DEMIL vehicles upon turn-in would allow DLA to avoid approximately \$250 - \$1,000 dollars per vehicle in transportation costs required to ship to one of the current DEMIL sites.

Figure 3 illustrates the projected costs and benefits associated with each model of HMMWV eligible for DEMIL and RTD/sale:

Model	Nomenclature	Vehicles Available	DEMIL	Expected	DLA	Total DLA Revenue
			Excess	For Sale	Labor Hours	
M1037	Shelter Carrier	336		227	2.7	\$5,270
M1097A1	Tall Cargo/Troop with Winch (Soft)	1,358		917	0.7	\$5,270
M1097A2	Tall Cargo/Troop with Winch (Soft)	6,738		4,548	0.7	\$5,270
M1097R1	Tall Cargo/Troop with Winch (Soft)	32,289		21,795	0.7	\$5,270
M1113	Shelter Carrier	3,104		2,095	2.7	\$5,270
<b>Totals:</b>		<b>43,825</b>		<b>29,582</b>		<b>\$155,905,356</b>

Figure 3: Alternative 2 Costs & Benefits

Cons: The military Services would have to perform additional work to DEMIL the vehicles.

Because the cost required to verify DEMIL of these vehicles is low the risk to DLA Disposition Services is minimal. The program should be closely monitored and suspended if it is at any time found to be unprofitable (e.g., if the market for HMMWVs were to become saturated, causing sales prices to drop below acceptable levels). The current revenue of approximately \$900 per demilitarized vehicle provides a very low bar for a sales program to be successful.

<sup>14</sup> In an email dated 30 March 2015, (b) (5) , (b) (5) AFSBn-Kuwait AMC (FWD), indicated that it requires approximately 60-70 man hours of labor to remove AOA from a HMMWV.

**External considerations:** This alternative requires coordination and cooperation of the DEMIL Code change with Army G4, US Army TACOM, and the DoD DEMIL Office. Sales would also have to be approved by the Department of Commerce and Department of State.

**Time to implement:** This alternative could be implemented immediately upon verification of the DEMIL Code change and approval by Departments of Commerce and State by focusing on the eligible HMMWV models without AOA. It is very similar to the status quo, with the addition of three vehicle types.

**Alternative 3:** Transport eligible Code "C" wheeled vehicles (M1037, M1097, & M1113) to one of three regional facilities established for contractor to perform DEMIL and offer them for RTD and public sale through a new contract.

**Cost:** This alternative would incur the additional transportation costs required to ship vehicles to a regional facility, as well as personnel costs to staff the facility. The recommended staffing structure is 1 x GS-7 to handle recordkeeping tasks and 2 x GS-11 as verifiers. It can also be assumed that the contractor's share of the sale price would exceed by an unknown amount the 24.71% in the Iron Planet contract since the contractor will be required to actually perform DEMIL of the vehicles. In most cases this would require 1 - 3 hours of labor per vehicle but the 31 vehicles with AOA would require 60 - 70 hours of labor each. Figure 4 illustrates the projected annual costs of staffing and operating three regional DEMIL facilities:

Description	Cost
Transportation	\$250 - \$1,000/vehicle
Staffing (annually)	\$300,000/site
Increased contractor fees	TBD

Figure 4: Additional Costs for Creating Regional DEMIL Sites

**Pros:** By having an experienced contractor perform DEMIL and providing dedicated DLAD-DS personnel to verify, DLA Disposition Services will reduce the risk of prohibited material being inadvertently released to the public. In addition, contractor personnel would have the expertise to DEMIL vehicles with AOA if desired. DLA revenue is estimated at \$4.5K/vehicle after transportation, with \$5.4M in fixed costs spread over five years.

**Cons:** Increased operating costs. This alternative would also require a new contract (sales or service) since the vehicles must be offered for RTD after DEMIL. Based on current RTD rates for HMMWVs we estimate that 32.5% of the demilitarized vehicles would be claimed, work for which the contractor would have to be reimbursed.

Figure 5 illustrates the projected costs and benefits associated with each model of HMMWV eligible for DEMIL:

Model	Nomenclature	Vehicles Available	DEMIL Labor Hours	Expected Sale Price /Vehicle	Gross DLA Revenue /Vehicle	Transportation /Vehicle	DLA Revenue /Vehicle	Total Gross DLA Revenue	
M1037	Shelter Carrier	336	227	2.7	\$7,000	\$5,270	(\$750)	\$4,520	\$1,025,204
M1097A1	Tall Cargo/Troop with Winch (Soft)	1,358	917	0.7	\$7,000	\$5,270	(\$750)	\$4,520	\$4,143,533
M1097A2	Tall Cargo/Troop with Winch (Soft)	6,738	4,548	0.7	\$7,000	\$5,270	(\$750)	\$4,520	\$20,559,002
M1097R1	Tall Cargo/Troop with Winch (Soft)	32,289	21,795	0.7	\$7,000	\$5,270	(\$750)	\$4,520	\$98,520,278
M1113	Shelter Carrier	3,104	2,095	2.7	\$7,000	\$5,270	(\$750)	\$4,520	\$9,470,933
	<b>Totals:</b>	<b>43,825</b>	<b>29,582</b>					<b>Total:</b> \$133,718,950	
								Staffing (6 years): (\$5,400,000)	
								Net DLA Revenue: \$128,318,950	

Figure 5: Alternative 3 Costs & Benefits

External considerations: Same as Alternative 2.

Time to implement: The Sales Office (J4) estimates that with their current workload they could not undertake the work for nine months, and it would also take months to let a new contract and establish the three regional facilities.

**Alternative 4:** Offer DEMIL as Condition of Sale contracts that allow Buyers to dismantle Code "C" wheeled vehicles and sell major components such as wheels, tires, axles, transmissions, fuel pumps, engines, etc. This course of action could be applied to damaged vehicles, models that are impossible or less economical to DEMIL, vehicles that are in excess of public demand, or all vehicles. There is a market for surplus HMMWV parts, most of which will also fit civilian AMC Hummers. A quick survey of commercial automotive parts dealers reveals the following military surplus used and new HMMWV parts for sale<sup>15</sup>:

Hard top
Engine
Winch
Tailgate
Alternator
Fuel pump
Tires
Rims
Doors
Seats
Windshield frame
Wheels

Figure 6: HMMWV Parts for Sale Commercially

Cost: The cost of this alternative would be minimal, possibly requiring additional support in the field if volumes are high. HMMWVs are already being shipped to contractors for DCOS; the only difference with this alternative is that Contractors would be allowed to sell some parts.

Pros: The benefits to DLA Disposition Services of such a program would come from Buyers willing to pay more for usable parts than for scrap metal. The precise revenue would be determined by the bids received, which in turn would depend upon the range of parts authorized to be sold and the extent to which the proposal was publicized. In theory all parts except the key points listed in Appendix A should be allowable for sale. These parts would be usable by owners of civilian Hummers as well as purchasers of surplus HMMWVs as described in Alternatives 2 and 3. The contractors themselves would be free to determine which parts on the list approved by DLA Disposition Services were marketable and could be economically recovered.

Cons: Potential risk of unintended releases.

External considerations: None.

Time to implement: This option would require initiating new Requests for Proposals for DCOS contracts allowing the sale of non-key parts, to be implemented incrementally as old contracts expire or are terminated. The Anniston, AL, contract is currently up for reoffer under the Scrap Venture initiative. The Crane, IN, and Red River, TX, contracts are still in effect but the minimums have been

<sup>15</sup> Parts shown are from the website of Eastern Surplus and Equipment Company, [www.easternsurplus.net/HMMWV.html](http://www.easternsurplus.net/HMMWV.html), retrieved 4 May 2015.

met and the contracts could be terminated at any time without penalty. The Red River contract falls under Scrap Venture while the Crane contract is DLA-managed.<sup>16</sup>

## 7.0. Risk Assessment

<b>Type of Risk</b>	<b>Likelihood of</b>			<b>Risk</b>	<b>Risk Reduction Measure</b>
	<b>Impact (1 - 5)</b>	<b>Occurrence (1 - 5)</b>	<b>Score (Impact x Likelihood)</b>		
Sale price drop	2	3	6	Low	Control
Manufacturer opposition	2	5	10	Medium	Accept
TACOM opposition	4	5	20	High	Accept
Fewer vehicles than expected	2	3	6	Low	Accept
Unexpected modifications	4	5	20	High	Control
Safety/liability	2	4	8	Low	Transfer
Release of prohibited items	4	4	16	Medium	Control

**Significance: 1 - 8 = Low; 9 - 16 = Medium; 17 - 25 = High**

Figure 7: Risks and Mitigation Plan

**Sale price:** There is no guarantee of the prices realized through public sales. When the first HMMWVs were sold in December 2014 they were bringing an average of \$30K. By April 2015 average realized prices had dropped to just over \$9.5K. This is partially due to the fact that some non-functional vehicles have been sold, but probably also reflective of the original excitement over the availability of military surplus HMMWVs dying down. Although it is safe to assume that serviceable utility vehicles will always have some market value, it is impossible to say with certainty that the price will remain steady.<sup>17</sup>

**Mitigation strategy:** Continue to release vehicles in small quantities over time as the current contractor is doing. Monitor vehicle sales for profitability. With revenue from mutilation limited to about \$900 per vehicle, it is unlikely sales would generate less; however, in the event prices drop below an acceptable level divert vehicles to a DCOS Contractor for salvage of usable parts and/or mutilation.

**Opposition of manufacturer:** AM General, manufacturer of the military HMMWV and civilian Hummer, officially opposes the sale of surplus HMMWVs:

The Humvee [sic] was designed for a military mission and was not designed to meet civilian safety standards. AM General does not endorse nor support the sale of these military vehicles to the general public or private entities. AM General further opposes any use of these military vehicles by individuals or entities outside of the military context for which the vehicles are designed. AM General does not sell the military vehicle or service parts for the military vehicle to the general public.<sup>18</sup>

<sup>16</sup> Email dated 7 May 2015 from (b) (5) Disposition Support Division (J42), DLA Disposition Services, (b) (5) @dla.mil.

<sup>17</sup> Email dated 22 Apr 2015 from (b) (5) Sales Branch (J422), DLA Disposition Services, (b) (5) @dla.mil.

<sup>18</sup> AM General website, <http://www.amgeneral.com/corporate/faq.php>, retrieved 12 March 2015.

(b) (5) [REDACTED]

Mitigation strategy: (b) (5) [REDACTED]

**Opposition of US Army TACOM:** (b) (5) [REDACTED]

Mitigation strategy: (b) (5) [REDACTED]

**Number of Excess HMMWVs Less Than Expected:** Current TACOM estimates of excess HMMWVs may change in the future. Furthermore, under provisions of 40 U.S.C. 503 the individual services have the authority to declare items surplus and dispose of them directly, using the funds generated in a similar program.<sup>19</sup> US Army TACOM has tentatively explored the possibility of selling its surplus HMMWVs and applying the funds to the purchase of new wheeled vehicles.<sup>20</sup>

Mitigation strategy: Accept. Minimize DLA Disposition Services exposure by minimizing costs wherever possible.

**Unexpected Modifications:** Despite the TACOM forecast of excess vehicle models to be turned in, it is possible the actual vehicles might have been modified in ways not reflected on the documents. Many vehicles have been modified in the field and these changes are not always noted by changing the NSN. These modifications could require excessive labor to DEMIL or could possibly even render the vehicle unsalable.

Mitigation strategy: Institute training to assist DS sites in correctly identifying key points and assisting units (Alternative 2) or the contractor (Alternative 3) in demilitarizing turned in vehicles. In the event of labor-intensive modifications or modifications that render the vehicle unsalable, divert vehicles to a scrap dealer for salvage of usable parts and/or mutilation.

**Safety/Liability:** (b) (5) [REDACTED]

Mitigation strategy: Accept; continue to transfer risk to end users through waivers and warnings.

**Release of prohibited items:** Current sales of HMMWVs have focused on vehicles with minimal and easily removable key points. Expanding the program to include vehicles which have potentially been modified by the installation of AOA or other sensitive items – which may or may not be reflected in the turn-in documents – exposes DLA Disposition Services to liability for sensitive items inadvertently released. This even extends to the possibility of high capacity rifle magazines or loose rounds of small arms ammunition– illegal in several states – being inadvertently left under the seats or in nooks and crannies of the vehicles. (b) (5) [REDACTED]

<sup>19</sup> The referenced code states in part “The exchange/sale authority is a statutory provision, (40 U.S.C. 503), which states in part: “In acquiring personal property, an executive agency may exchange or sell similar items and may apply the exchange allowance or proceeds of sale in whole or in part payment for the property acquired.”

<sup>20</sup> Telephone conversation 8 Apr 2015 with (b) (5) [REDACTED] DOD Demilitarization Program Manager, DLA J33, (b) (5) [REDACTED] @dla mil.

Mitigation strategy: (b) (5)

(b) (5)

## 8.0. Recommendations

Based on the above analysis, there is no downside to authorizing the sale of any non-armored HMMWV or parts thereof with DEMIL Code "C", provided all key points are properly removed. In every alternative considered by this BCA, the vehicles should yield a profit greater than the estimated \$900 generated by mutilation for scrap. However, given the sheer number of vehicles projected as excess and the increased labor required to DEMIL vehicles with AOA, we recommend that DLA Disposition Services focus on selling the most easily converted vehicles, stripping others of parts for repair or individual sale (a combination of Alternatives 2 and 4). The following recommendations are provided for each vehicle type:

Model	Nomenclature	Vehicles Available For		Net DLA Revenue /Vehicle	Recommendation	Total Revenue
		Excess	Sale			
M1037	Shelter Carrier	336	227	\$5,270	DEMIL and RTD/sell	\$1,195,304
M1097A1	Tall Cargo/Troop with Winch (Soft)	1,358	917	\$5,270	DEMIL and RTD/sell	\$4,831,020
M1097A2	Tall Cargo/Troop with Winch (Soft)	6,738	4,548	\$5,270	DEMIL and RTD/sell	\$23,970,115
M1097R1	Tall Cargo/Troop with Winch (Soft)	32,289	21,795	\$5,270	DEMIL and RTD/sell	\$114,866,584
M1113	Shelter Carrier	3,104	2,095	\$5,270	DEMIL and RTD/sell	\$11,042,333
		<b>Totals:</b>	<b>43,825</b>	<b>29,582</b>		<b>\$155,905,356</b>
Model	Nomenclature	Vehicles Available For		Net DLA Revenue /Vehicle	Recommendation	
		Excess	Sale			
M1037P1	Shelter Carrier w/AOA	3	2	Variable	DCOS Vendor	
M1097P1	Tall Cargo/Troop with Winch (Soft) w/AOA	1	1	Variable	DCOS Vendor	
M1097A1P1	Tall Cargo/Troop with Winch (Soft) w/AOA	6	4	Variable	DCOS Vendor	
M1097A2P1	Tall Cargo/Troop with Winch (Soft) w/AOA	21	14	Variable	DCOS Vendor	
M1025	Weapon Mounts (Aluminum-Turtle Shell)	1,133	765	Variable	DCOS Vendor	
M1025P1	Weapon Mounts (Aluminum-Turtle Shell) w/AOA	51	34	Variable	DCOS Vendor	
M1025A1	Weapon Mounts (Aluminum-Turtle Shell)	1,721	1,162	Variable	DCOS Vendor	
M1025A2	Weapon Mounts (Aluminum-Turtle Shell)	395	267	Variable	DCOS Vendor	
M1025A2P1	Weapon Mounts (Aluminum-Turtle Shell) w/AOA	16	11	Variable	DCOS Vendor	
M1026	Weapon Mounts with Winch (Aluminum-Turtle Shell)	549	371	Variable	DCOS Vendor	
M1026P1	Weapon Mounts with Winch (Aluminum-Turtle Shell)	5	3	Variable	DCOS Vendor	
M1026A1	Weapon Mounts with Winch (Aluminum-Turtle Shell)	405	273	Variable	DCOS Vendor	
M1121	Up-Armored, TOW missile	420	284	Variable	DCOS Vendor	
M966	TOW missile (Aluminum-Turtle Shell)	91	61	Variable	DCOS Vendor	
M1114	Up-Armored, Weapon Mounts, and Winch	1727	1,166	Variable	DCOS Vendor	
M1151	Enhanced Armament Carrier	131	88	Variable	DCOS Vendor	
M1151P1	Enhanced Armament Carrier w/add-on armor	278	188	Variable	DCOS Vendor	
M1151A1	Enhanced Armament Carrier (Expanded)	2861	1,931	Variable	DCOS Vendor	
M1152	Enhanced Troop/Cargo	1039	701	Variable	DCOS Vendor	
M1152P1	Enhanced Troop/Cargo w/add-on armor	64	43	Variable	DCOS Vendor	
M1165	Ground Sensor Surveillance Vehicle	79	53	Variable	DCOS Vendor	
		<b>Totals:</b>	<b>10,996</b>	<b>7,422</b>		

Figure 8: Recommendations by Vehicle Type

**Bottom line:**

- M1097 tall cargo/troop carrier variants without AOA should be demilitarized and sold as long as the market will support the sales. (b) (5)  
[REDACTED]
- M1037 and M1113 shelter carrier variants should also be demilitarized and sold as long as the market will support the sales; (b) (5)  
[REDACTED]
- HMMWV variants with AOA should be reutilized or sent to a DCOS Contractor because of the 60 - 70 hours of labor required to remove the armor. Reutilization customers within DoD can be encouraged to take HMMWVs with AOA before unarmored versions.
- Vehicles with integral armor should be reutilized or sent to a DCOS Contractor (b) (5)  
(b) (5)  
[REDACTED]

## 9.0 Submitting Organization and Approval Chain

### Submitting Organization

- Point of Contact: (b) (5)
- Organization: Analytic Strategies, LLC / DLA Operations Research and Resource Analysis
- Phone: (b) (5)
- E-Mail: (b) (5) @dla.mil

### Strategic Distribution and Disposition Level Approval

- Point of Contact: (b) (5)
- Organization: DLA J34, Strategic Distribution and Disposition (SDD) Program
- Phone: (b) (5)
- E-Mail: (b) (5) @dla.mil

### DLA Disposition Services Staff Approval

- Comments:
- Concur/Non-concur:
- Organization: DLA Disposition Services, J54, Strategic & Enterprise Planning
- Signature:

## Appendix A – List of HMMWV Key points

DoD Manual 4160.28-M, Volume 2, includes a definition of key points, as well as guidance for removing and disposing of them as DEMIL Code D. Key points for High Mobility Multipurpose Wheeled Vehicles (HMMWVs) that are armed or are specially designed to serve as a firing or launch platform or equipped with any mission systems identified in Parts 1 of the United States Munitions List (USML) Categories I through XXI include the following:

- Armor integral to structure or add-on armor (bolted, welded, or otherwise attached). This armor can be located to protect crew areas as well as the underbody and engine compartments
- Ceramic or composite plates that provide protection equal to or greater than NIJ Type IV
- Non-explosive spaced armor components and parts, including slat armor
- Reactive armor parts and explosive parts and components
- Electromagnetic armor parts and components, including pulsed power specially designed parts and components
- Built in test equipment (BITE) to evaluate the condition of weapons or other mission systems for military ground vehicles
- Gun mount, stabilization, turret drive, turret rings and automated elevating systems and specially designed components
- Fire control computers, mission computers, vehicle management systems, armaments control processors, vehicle weapons interface units and computers
- Test or calibration equipment for the mission systems of these vehicles
- Decals, labels and technical manuals containing technical data directly related to the defense articles enumerated in paragraphs (a) through (g) of Category VII of DOD4160.28M Volume 2
- Electronic combat equipment such as:
  - Active and/or passive counter-countermeasures
  - Radios designed or modified to interfere with other communication devices or transmissions
  - Command, control, and communications systems to include radios (transceivers), navigation and identification systems.
  - Cryptographic equipment
  - Emergency radio receiver-transmitter equipment and beacons
    - Major communication/fire control components parts, etc...including but not limited to antennas, antenna bases, antenna feedhorns, and amplifiers
    - Communications shelters
    - Directed energy weapons systems for military applications: Laser/particle beam systems.
    - Chemical, Biological, Radiological, and Nuclear detection and testing devices

The following items are restricted as DEMIL code Q/3 (this changed from DEMIL B due to the ECRI), require mutilation to the point of scrap IAW DODI 2030.08:

- Wiring harnesses and cable assemblies designed specifically for a military application (e.g. communications/radio cables/fire support (i.e. CROW)). You are authorized to mutilate the cable assemblies by cutting/removing the cable head/connectors on both ends of the cable. There is no need to remove the cable once the connectors have been cut.
- Deep water fording kits specially designed for ground vehicles identified by paragraph (a) of ECCN 0A606 or Part 1 USML Category VII
- National Institute of Justice (NIJ) Standard 0108.01, Ballistic Resistant Materials (ballistic glass, doors, etc...)



## Strategic Distribution and Disposition (SDD) R&D Program DEMIL Code C Wheeled Vehicle Sales



### Technical Approach

- Determined potentially eligible vehicles.
- Identified key points and effort required to remove them.
- Developed a Business Case Analysis (BCA) Level 1 to determine potential costs and benefits of sales program.
- Identified legal, policy, or procedural issues that must be addressed prior to selling vehicles to the public.
- Identified potential risks and developed Risk Management Plan for mitigating them.

### Problem

There are approximately 55K High Mobility Multipurpose Wheeled Vehicle (HMMWVs) scheduled for disposal by 2021. Most HMMWVs are currently sold for scrap (mutilation required), yielding ~ \$0.07 - 0.09/pound. There is a demand for surplus HMMWVs but many obstacles to public sales.

### Outcome/Benefits

Completed a 6-month, Exploratory Concepts R&D Project, culminating in a Business Case Analysis (BCA) Level 1 to explore the sale of DEMIL Code C wheeled vehicles.

The BCA identified three models of HMMWV (43,825 expected surplus vehicles) suitable for public sale after DEMIL. The recommended courses of action are anticipated to yield up to \$155.9M in vehicle sales and an undetermined amount in DEMIL as Condition of Sale scrap sales.



# Department of Defense INSTRUCTION

**NUMBER 4160.28**

April 7, 2011

*Incorporating Change 1, September 14, 2017*

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USD(AT&L)

SUBJECT: DoD Demilitarization (DEMIL) Program

References: See Enclosure 1

1. PURPOSE. This Instruction establishes policy and assigns responsibilities for the DoD DEMIL program in accordance with the authority in DoD Directive 5134.01 (Reference (a)) for mandatory DEMIL training, oversight of DEMIL functions, DEMIL code assignment accuracy, and DEMIL life cycle planning in accordance with section 1051 of Public Law 105-261 (Reference (b)).

2. APPLICABILITY. This Instruction applies to:

a. OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the Department of Defense (hereafter referred to collectively as the "DoD Components").

b. DoD personal property in possession of DoD Special Programs as defined in DoD *Manual 4160.21-M* (Reference (c)).

c. DoD personal property in possession of other Federal agencies (OFA) in accordance with parts 101 and 102 of title 41, Code of Federal Regulations (CFR) (Reference (d)).

3. DEFINITIONS. See Glossary.

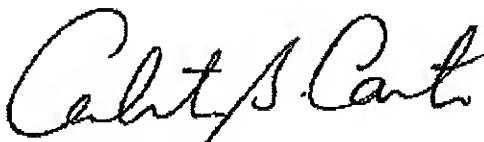
4. POLICY. It is DoD policy that:

- a. The Department of Defense shall maintain the DoD DEMIL Program to evaluate and support the execution of DEMIL requirements within the Department of Defense, DoD Special Programs, and OFAs.
- b. DoD programs for the research, development, and acquisition; management; sustainment; maintenance; disposition; or release of DoD personal property outside the control of the Department of Defense shall be administered for proper DEMIL analysis, planning, and execution.
- c. DoD personal property identified as significant military equipment on the United States Munitions List (USML) in accordance with parts 120 through 130 of title 22, CFR (Reference (e)) and other DoD personal property determined to have significant military utility shall be demilitarized prior to release from DoD control except when permitted pursuant to specific legal authority.
- d. DoD personal property identified by parts 730 through 774 of title 15, CFR (Reference (f)) as being on the Commerce Control List (CCL) shall be mutilated to the point of scrap worldwide or controlled utilizing established trade security controls (TSC) measures in accordance with DoD Instruction 2030.08 (Reference (g)) prior to release from DoD control except when permitted pursuant to specific legal authority. Sensitive and non-sensitive Commerce Control List Items (CCLI) located outside the United States and its territories shall be mutilated before release. Inside the United States and its territories, only sensitive CCLI require mutilation before release, while non-sensitive CCLIs may be released with appropriate TSC. International transfers shall follow the procedures in DoD Instruction 2040.02 (Reference (h)).

5. RESPONSIBILITIES. See Enclosure 2.

6. RELEASABILITY. UNLIMITED. This Instruction is approved for public release and is available on the Internet from the DoD Issuances Website at <http://www.dtie.mil/whs/directives>. Cleared for public release. This instruction is available on the Directives Division Website at <http://www.esd.whs.mil/DD/>.

7. EFFECTIVE DATE. This Instruction is effective upon its publication to the DoD Issuances Website April 7, 2011.



Ashton B. Carter  
Under Secretary of Defense for  
Acquisition, Technology, and Logistics

Enclosures

1. References
  2. Responsibilities
- Glossary

TABLE OF CONTENTS

ENCLOSURE 1: REFERENCES.....	45
ENCLOSURE 2: RESPONSIBILITIES.....	56
UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS (USD(AT&L)) .....	56
ASSISTANT SECRETARY OF DEFENSE FOR LOGISTICS AND MATERIEL READINESS (ASD(L&MR)) .....	56
DIRECTOR, DEFENSE LOGISTICS AGENCY (DLA).....	56
DIRECTOR, DEFENSE SECURITY COOPERATION AGENCY (DSCA) .....	67
HEADS OF THE DoD COMPONENTS .....	78
SECRETARIES OF THE MILITARY DEPARTMENTS.....	78
GLOSSARY .....	910
PART I: ABBREVIATIONS AND ACRONYMS .....	910
PART II: DEFINITIONS.....	910

ENCLOSURE 1REFERENCES

- (a) DoD Directive 5134.01, "Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)),," December 9, 2005, *as amended*
- (b) Section 1051 of Public Law 105-261, "Strom Thurmond National Defense Authorization Act for Fiscal Year 1999," October 17, 1998
- (c) ~~DoD 4160.21-M, "Defense Materiel Disposition Manual," August 18, 1997~~
- (d) ~~DoD Manual 4160.21, "Defense Materiel Disposition," October 22, 2015~~
- (e) Parts 101 and 102 of title 41, Code of Federal Regulations
- (f) Parts 120 through 130 of title 22, Code of Federal Regulations
- (g) Parts 730 through 774 of title 15, Code of Federal Regulations
- (h) DoD Instruction 2030.08, "Implementation of Trade Security Controls (TSC) for Transfers of DoD U.S. Munitions List (USML) and Commerce Control List (CCL) Personal Property to Parties Outside DoD Control," ~~May 23, 2006~~ February 19, 2015, *as amended*
- (i) DoD Instruction 2040.02, "International Transfers of Technology, Articles, and Services," ~~July 10, 2008~~ March 27, 2014, *as amended*
- (j) DoD Directive 5134.12, "Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD(L&MR)),," May 25, 2000, *as amended*
- (k) ~~DoD 5105.38-M, "Security Assistance Management Manual," October 3, 2003~~
- (l) ~~DSCA 5105.38-M, "Electronic Security Assistance Management Manual," April 30, 2012~~
- (m) ~~DoD 4100.39-M, "Federal Logistics Information System (FLIS) Procedures Manual," as amended~~
- (n) ~~DoD Manual 4100.39, "Federal Logistics Information System (FLIS) Procedures," March 8, 2017~~
- (o) DoD Directive 5000.01, "The Defense Acquisition System," May 12, 2003
- (p) Joint Publication 1-02, "Department of Defense Dictionary of Military and Associated Terms," current edition
- (q) Office of the Chairman of the Joint Chiefs of Staff, "DoD Dictionary of Military and Associated Terms," current edition

ENCLOSURE 2RESPONSIBILITIES

1. UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS (USD(AT&L)). The USD(AT&L) shall develop implementing guidance as appropriate on all matters relating to the DEMIL of DoD personal property.
2. ASSISTANT SECRETARY OF DEFENSE FOR LOGISTICS AND MATERIEL READINESS (ASD(L&MR)). The ASD(L&MR), under the authority, direction, and control of the USD(AT&L) and consistent with DoD Directive 5134.12 (Reference (i)), shall implement the DoD DEMIL Program.
3. DIRECTOR, DEFENSE LOGISTICS AGENCY (DLA). The Director, DLA, under the authority, direction, and control of the USD(AT&L), through the ASD(L&MR), shall, in addition to the responsibilities in section 5 of this enclosure:
  - a. Maintain a DoD Demilitarization Program Office (DDPO) and designate a DoD Demilitarization Program Manager (DDPM) with direct reporting authority to the Director, DLA, to support the intent of Reference (b) for management control and oversight of the DoD DEMIL Program in coordination with the ASD(L&MR) and the Heads of the DoD Components to:
    - (1) Provide guidelines for the identification and DEMIL of DoD personal property to prevent its unauthorized use and the potential compromise of U.S. national security.
    - (2) Evaluate DoD DEMIL program deficiencies and advances in technology in coordination with the Defense Technology Security Administration and recommend changes to lists of defense articles requiring DEMIL and other controls.
    - (3) Chair meetings with Military Service and Defense Agency DEMIL Program administrators on an as-required basis to discuss DEMIL procedural changes and potential policy impacts.
    - (4) In accordance with Reference (b), maintain the DoD Demilitarization Life Cycle Planning Center (DLPC) to support the DDPO in executing DoD DEMIL program responsibilities for DEMIL planning during total life cycle systems management.
    - (5) In accordance with Reference (b), maintain an appropriate DoD DEMIL training program and continuously evaluate and develop a revised training curriculum for all DoD Components, DoD Special Programs, and OFAs who utilize DoD personal property.

(6) Maintain and update the DoD DEMIL Program Website with the latest DoD DEMIL Program information.

(7) Review and take appropriate action on requests for waivers and modifications.

b. In accordance with Reference (b), maintain the DoD Demilitarization Coding Management Office (DDCMO) within the DLA Logistics Information Service to improve DEMIL code accuracy.

(1) The DDPM shall provide operational direction for the DDCMO's mission and functions as an integral part of the DDPO in accordance with the intent of Reference (b).

(2) The DLA Logistics Information Service shall provide administrative direction and support for the DDCMO's mission and functions in full cooperation with the DDPM.

c. Maintain the Controlled Property Verification Office within the DLA Disposition Services under operational control of the DDPM to support the DDCMO in validating DEMIL codes cited on DoD personal property receipt documents.

d. Maintain the controlled property process within the DLA Disposition Services, to include identification and verification of DEMIL required DoD personal property turned in as batch lots and DoD personal property turned in with suspect local stock numbers.

e. Maintain centralized DEMIL centers within the DLA Disposition Services to perform required physical DEMIL.

f. Establish DEMIL instructions in a readily available location for every DLA-managed National Item Identification Number (NIIN) that requires such instructions.

g. Identify DEMIL requirements in the terms and conditions of DLA contracts.

h. Require that each DLA Supply Center appoint a knowledgeable individual to serve as the DEMIL Administrator for that DLA Supply Center to support DoD DEMIL Program execution.

4. DIRECTOR, DEFENSE SECURITY COOPERATION AGENCY (DSCA). The Director, DSCA, under the authority, direction, and control of the Under Secretary of Defense for Policy, and in addition to the responsibilities in section 5 of this enclosure, shall, for DoD personal property provided under security assistance programs in accordance with *DoD DSCA 5105.38-M* (Reference (j)):

a. Assist Security Cooperation Organizations (SCOs) in responding to issues associated with DEMIL requirements and, as necessary on a case-by-case basis, support SCO supervision of approved DEMIL performance.

b. Designate a point of contact to work with DDPM, SCO, and Department of State in DoD DEMIL Program oversight.

c. Ensure that appropriate guidance regarding DEMIL requirements is incorporated into Reference (j).

5. HEADS OF THE DoD COMPONENTS. The Heads of the DoD Components shall:

a. Plan and budget for DoD personal property DEMIL requirements throughout the total life cycle systems management process and identify DEMIL requirements in all procurement actions in their Components.

b. Ensure personnel assigned duties specifically for DEMIL receive required training to identify requirements for DEMIL as part of the acquisition process. Training will include the following topics: identification of DoD personal property; DEMIL code assignment, administration, management, disposition; and performing physical DEMIL.

c. Apply appropriate inventory controls based on the assigned Controlled Inventory Item Code (CIIC) for DoD personal property with DEMIL requirements during all phases of the acquisition life cycle.

d. Administer DEMIL requirements as provided for in terms and conditions of assigned contracts.

6. SECRETARIES OF THE MILITARY DEPARTMENTS. The Secretaries of the Military Departments, in addition to the responsibilities in section 5 of this enclosure, shall:

a. Designate a DEMIL Program Administrator to support the DDPM in DoD DEMIL Program oversight of their respective Military Departments.

b. For each inventory control point (ICP) under their respective Military Department, require an individual knowledgeable in DEMIL be appointed to serve as the DEMIL Administrator for that ICP to support DoD DEMIL Program execution.

c. Provide DEMIL plans to the respective Military Department DEMIL Program Administrator and the DDPM, when requested, to support DoD DEMIL program oversight reviews and to activities requiring the plans to perform physical DEMIL.

d. Assign an accurate DEMIL code to every item of DoD personal property for which each Military Department has management responsibility to include items for which logistic responsibility has been reassigned.

e. Require that DoD Component Defense Acquisition Program Managers (DAPM) apply DEMIL requirements during the entire system design process and prepare programmatic and procedural DEMIL plans and related documentation.

- f. Establish DEMIL instructions in a readily available location for every managed NIIN that requires such instructions.
- g. Support the DoD DEMIL Code Challenge Program and collaborate with the DDCMO on code corrections.
- h. Identify DEMIL requirements in the terms and conditions of DoD Component contracts.
  - i. Identify the DEMIL requirement as indicated by the assigned DEMIL code and, when available, documentation such as DEMIL plans, to the DSCA to support security assistance program case development and oversight.

GLOSSARYPART I. ABBREVIATIONS AND ACRONYMS

ASD(L&MR) Assistant Secretary of Defense for Logistics and Materiel Readiness

CCL	Commerce Control List
CCLI	Commerce Control List Item
CFR	Code of Federal Regulations
CIIC	Controlled Inventory Item Code
DAPM	Defense Acquisition Program Manager
DDCMO	DoD Demilitarization Coding Management Office
DDPM	DoD Demilitarization Program Manager
DDPO	DoD Demilitarization Program Office
DEMIL	demilitarization
DLA	Defense Logistics Agency
DLPC	DoD Demilitarization Life Cycle Planning Center
DSCA	Defense Security Cooperation Agency
ICP	inventory control point
NIIN	national item identification number
OFA	other Federal agency
SCO	Security Cooperation Organization
TSC	trade security controls
USD(AT&L)	Under Secretary of Defense for Acquisition, Technology, and Logistics
USML	United States Munitions List

PART II. DEFINITIONS

Unless otherwise noted, these terms and their definitions are for the purpose of this Instruction.

CCL. Defined in part 772 of Reference (f).

CCLI. An item included on the CCL.

CIIC. Defined in DoD *Manual 4100.39-M* (Reference (k)).

DAPM. The designated individual with responsibility for and authority to accomplish Defense acquisition program objectives for development, production, and sustainment to meet the user's operational needs in accordance with DoD Directive 5000.01 (Reference (l)).

DDCMO. An organization within the Defense Logistics Information Service under the auspices of the centralized DDPO established to support the plans required by Reference (b) to improve accuracy of DEMIL codes.

defense article. Defined in subpart 120.6 of Reference (e).

DEMIL. The act of eliminating the functional capabilities and inherent military design features from DoD personal property. Methods and degree range from removal and destruction of critical features to total destruction by cutting, crushing, shredding, melting, burning, etc. DEMIL is required to prevent property from being used for its originally intended purpose and to prevent the release of inherent design information that could be used against the United States. DEMIL applies to DoD personal property in both serviceable and unserviceable condition.

DEMIL code. A code assigned to DoD personal property. It indicates the degree of required physical destruction, identifies items requiring specialized capabilities or procedures, and identifies items that do not require DEMIL but may require TSC. It is used throughout the total life cycle systems management process to identify control requirements required before release of DoD personal property from DoD control.

DEMIL plan. A set of procedures and information to assist in the performance of physical DEMIL or the programmatic conduct of analysis and planning for DEMIL. A DEMIL plan is a living document that should be updated throughout the total life cycle systems management process. There are two types:

procedural DEMIL plan. A plan that provides information to support the performance of physical DEMIL and is needed before DoD personal property will be subject to a disposal requirement.

programmatic DEMIL plan. A plan tailored to each acquisition program that may be addressed as a stand-alone or integrated with other plans. It should address how DEMIL considerations will be integrated into system engineering processes.

DLPC. An organization established by the DDPM to support plans required by Reference (b) to improve the implementation of DEMIL requirements throughout the defense acquisition life cycle in accordance with Reference (l).

DoD DEMIL Code Challenge Program. A quality control program implemented by the DDPM and administered by the DDCMO to validate DEMIL code accuracy.

DoD personal property. Defined in Reference (g).

ICP. Defined in ~~Joint Publication 1-02~~ *the DoD Dictionary of Military and Associated Terms* (Reference (m)).

NIIN. Defined in Reference (k).

TSC. Defined in Reference (g).

United States and its territories. Includes the 50 States; the District of Columbia; the U.S. Virgin Islands, American Samoa, Guam, Puerto Rico, the Northern Mariana Islands, the Federated States of Micronesia, the Marshall Islands, and Palau.

USML. Defined in part 121 of Reference (e).



## DoD MANUAL 4160.28, VOLUME 1

## DEFENSE DEMILITARIZATION: PROGRAM ADMINISTRATION

**Originating Component:** Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics

**Effective:** August 9, 2017

*Change 1 Effective:* January 16, 2018

**Releasability:** Cleared for public release. This manual is available on the Directives Division Website at <http://www.esd.whs.mil/DD/>.

*Cleared for public release. This volume is available on the Directives Division Website at <http://www.esd.whs.mil/DD/>.*

**Reissues and Cancels:** DoD Manual 4160.28, Volume 1, "Defense Demilitarization: Program Administration," June 7, 2011

**Approved by:** Kristin French, Acting Assistant Secretary of Defense for Logistics and Materiel Readiness

*Change 1 Approved by:* Judy Dahlgren, Director for Administration, for the Under Secretary of Defense for Acquisition, Technology, and Logistics

**Purpose:** This issuance is composed of several volumes, each containing its own purpose. In accordance with the authority in DoD Directives (DoDD) 5134.01 and 5134.12:

- This issuance implements the policy in DoD Instruction (DoDI) 4160.28, assigns responsibilities, and provides procedures for assessing demilitarization (DEMIL) requirements and physically demilitarizing DoD personal property.
- This volume assigns responsibilities and prescribes procedures for program administration, training, planning, code validation, and waivers.

## TABLE OF CONTENTS

SECTION 1: GENERAL ISSUANCE INFORMATION .....	4
1.1. Applicability. ....	4
SECTION 2: RESPONSIBILITIES .....	5
2.1. Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD(L&MR)) ..	5
2.2. Director, Defense Logistics Agency (DLA). ....	5
2.3. Director, Defense Security Cooperation Agency (DSCA). ....	6
2.4. DoD Component Heads. ....	6
2.5. Secretaries of the Military Departments. ....	7
SECTION 3: DEMIL PROGRAM ADMINISTRATION.....	8
3.1. Introduction.....	8
3.2. Control DoD Personal Property Release with a DEMIL code. ....	8
3.3. DEMIL as a Life-Cycle Requirement.....	9
3.4. DDPO.....	11
3.5. Conventional Ammunition DEMIL.....	11
3.6. DEMIL Program Supplementary Guidance.....	11
SECTION 4: DEMIL TRAINING .....	13
4.1. Introduction.....	13
4.2. Functional Areas. ....	13
4.3. DDPC.....	13
4.4. Related training Courses. ....	14
SECTION 5: DEMIL PLANNING GUIDANCE .....	15
5.1. Introduction.....	15
5.2. Relationships with Other Program Planning Activities. ....	15
5.3. DEMIL Plan Types. ....	16
5.4. Principles for Developing Procedural DEMIL Plans.....	17
5.5. Review and Distribution. ....	18
SECTION 6: DEMIL CODE VALIDATION .....	19
6.1. Introduction.....	19
6.2. DEMIL ICs. ....	19
6.3. DEMIL Code Challenge Process. ....	20
6.4. Critical FSGs, FSCs, and Key Words.....	21
6.5. DEMIL Codes for Low Risk Items. ....	24
SECTION 7: DEMIL WAIVERS.....	25
7.1. Introduction.....	25
7.2. Submission and Review Process.....	25
7.3. Dispositions Where DEMIL Waivers May Be Requested. ....	25
a. Exchange or Sale. ....	25
b. Burial. ....	26
c. Hazardous Waste. ....	26
d. Museum Display. ....	26
e. Certification or Verification. ....	26
7.4. Dispositions Where DEMIL Waivers Will Not Be Granted. ....	26
a. Obsolete. ....	26

b. Classified.....	26
7.5. Waiver Request Packages.....	26
7.6. DEMIL Waivers and TSCs For Exchange or Sale Transactions.....	27
GLOSSARY .....	29
G.1. Acronyms.....	29
G.2. Definitions.....	30
REFERENCES .....	33

**TABLES**

Table 1. DEMIL ICs .....	19
Table 2. Critical FSGs or FSCs.....	21
Table 3. Key Words .....	23
Table 4. DoD DEMIL Program Office Contact Information .....	25

**FIGURES**

Figure 1. Sources of Potential Diversion .....	8
Figure 2. DEMIL Within the Life-Cycle .....	10
Figure 3. DEMIL Waivers and TSCs for Exchange or Sale Transactions .....	28

## SECTION 1: GENERAL ISSUANCE INFORMATION

### 1.1. APPLICABILITY. This issuance:

- a. Applies to OSD, the Military Departments (including the Coast Guard at all times, including when it is a Service in the Department of Homeland Security by agreement with that Department), the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this issuance as the "DoD Components").
- b. Does not apply to:
  - (1) Nuclear materiel controlled by the Defense Threat Reduction Agency.
  - (2) Technical data, including digital format and software, controlled under DoDI 5230.24, DoDI 8500.01, or Volume 3 of DoD Manual (DoDM) 5200.01 (except when included on an item of supply such as labels).

## SECTION 2: RESPONSIBILITIES

**2.1. ASSISTANT SECRETARY OF DEFENSE FOR LOGISTICS AND MATERIEL READINESS (ASD(L&MR)).** Under the authority, direction, and control of the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) and consistent with DoDD 5134.12, the ASD(L&MR) implements the DoD DEMIL Program.

**2.2. DIRECTOR, DEFENSE LOGISTICS AGENCY (DLA).** In addition to the responsibilities in Paragraph 2.4., and under the authority, direction, and control of the USD(AT&L), through the ASD(L&MR), the Director, DLA:

- a. Maintains the DoD Demilitarization Program Office (DDPO) and designates the DoD Demilitarization Program Manager (DDPM), who reports directly to the Director, DLA, for managing, controlling, and overseeing the DoD DEMIL Program.
- b. Establishes the DoD DEMIL Policy Working Group.
- c. In accordance with DoDI 4160.28, maintains the DoD Demilitarization Coding Management Office (DDCMO) within the DLA Logistics Information Service to:
  - (1) Improve DEMIL code accuracy.
  - (2) Provide administrative direction and support for the DDCMO's mission.
  - (3) Function in full cooperation with the DDPM.
- d. Maintains the Controlled Property Verification Office and processes within the DLA Disposition Services under operational control of the DDPM.
  - (1) Supports the DDCMO in validating DEMIL codes cited on DoD personal property receipt documents.
  - (2) Identifies and verifies requirements for:
    - (a) DEMIL and trade security controlled DoD personal property turned in for disposal.
    - (b) DoD personal property turned in with non-standard stock numbers, more commonly referred to as local stock numbers.
- e. Identifies DEMIL requirements in the terms and conditions of DLA contracts.
- f. Requires that each DLA field activity appoint a knowledgeable individual to serve as the DEMIL administrator to support DEMIL Program execution.

- g. Establishes DEMIL guidance in a readily available location for every DLA-managed item with a national item identification number that requires such guidance.
- h. Provides coding accuracy metrics to Military Department DEMIL administrators.
- i. Coordinates with the Assistant Secretary of Defense for Energy, Installations, and Environment on munitions and explosives disposition and disposal procedures.

**2.3. DIRECTOR, DEFENSE SECURITY COOPERATION AGENCY (DSCA).** In addition to the responsibilities in Paragraph 2.4., and under the authority, direction, and control of the Under Secretary of Defense for Policy, through the Assistant Secretary of Defense for Strategy, Plans, and Capabilities, the Director, DSCA:

- a. Designates a program point of contact to work with the DDPM, Security Cooperation Organization, and the Department of State (DOS) in DEMIL program oversight.
- b. Identifies DEMIL requirements in case documentation for all defense articles, with priority attention to those defense articles requiring enhanced end-use monitoring in accordance with DSCA Manual 5105.38-M.
- c. Provides DEMIL guidance to implementing agencies, geographical Combatant Commands, and security cooperation organizations to ensure that recipients of defense articles and services provided by the U.S. Government comply with DEMIL requirements as provided in transfer agreements.

**2.4. DOD COMPONENT HEADS.** The DoD Component heads:

- a. Plan and budget for DoD personal property DEMIL requirements throughout the defense acquisition life-cycle. Identify DEMIL requirements in all procurement actions in their respective DoD Components, in accordance with the Defense Acquisition Guidebook.
- b. Support DEMIL training requirements for personnel with duties and responsibilities applicable to the acquisition of DEMIL required DoD personal property, DEMIL code assignment, administration, management, disposition, and DEMIL.
- c. Apply appropriate inventory controls based on the assigned controlled inventory item code (CIIC) for DoD personal property with DEMIL requirements during all phases of the acquisition life-cycle.
- d. Administer DEMIL requirements in accordance with terms and conditions of assigned contracts.
- e. Develop appropriate contract terms and conditions necessary for contractors to follow the requirements of this volume.

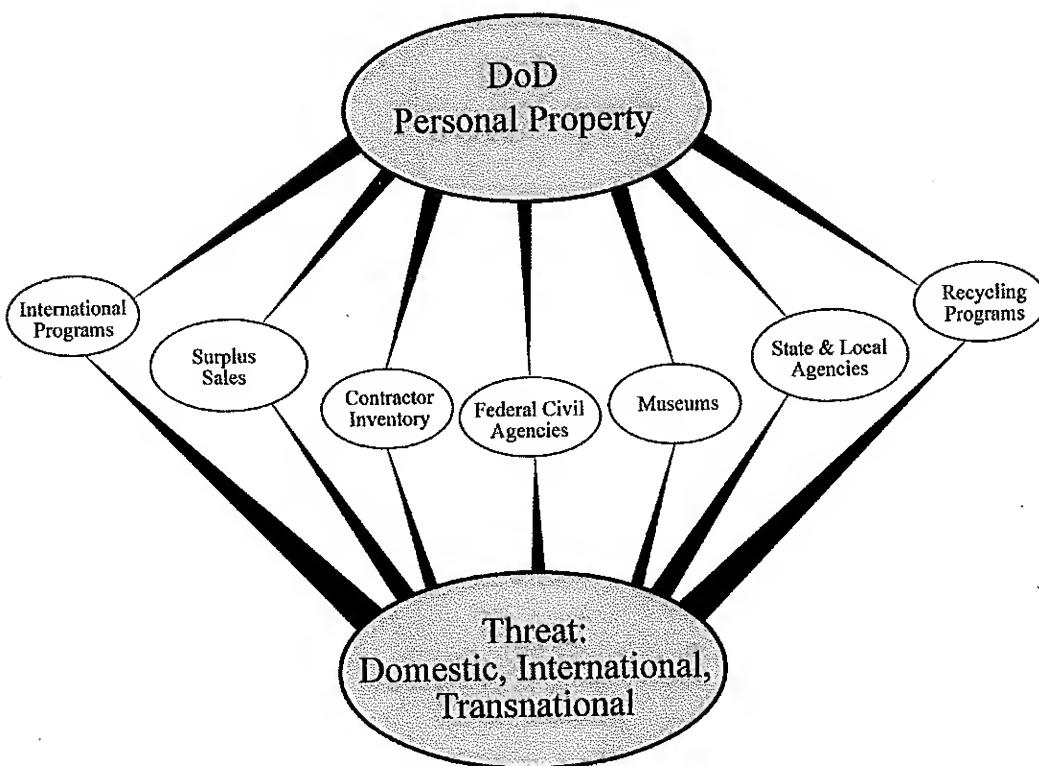
**2.5. SECRETARIES OF THE MILITARY DEPARTMENTS.** In addition to the responsibilities in Paragraph 2.4., the Secretaries of the Military Departments:

- a. Designate a DEMIL program administrator to support the DDPM in overseeing his or her respective Military Department's DEMIL program.
- b. Require that each inventory control point (ICP) under their respective Military Department appoint a knowledgeable individual to serve as the DEMIL administrator for that ICP to support the DEMIL program.
- c. Provide DEMIL plans to:
  - (1) The respective Military Department DEMIL program administrator and the DDPM, when requested, to support DEMIL program oversight reviews.
  - (2) Activities that need the plans to physically demilitarize personal property.
- d. Require that program managers (PMs) apply DEMIL requirements during the entire system design process and prepare programmatic and procedural DEMIL plans and related documentation.
- e. Identify DEMIL requirements in the terms and conditions of DoD Component contracts.
- f. Provide Military Department representation at DDPM-led working groups.
- g. Evaluate currency of Military Department DEMIL policy, procedures, and guidance and coordinate with document owners to update them as DoD policy, procedures, and guidance warrant.
- h. Analyze coding accuracy statistics and training metrics from each ICP. Coordinate with each ICP to conduct corrective action when coding accuracy and training completion is less than 90 percent.
- i. Support the DoD DEMIL Code Challenge Program and collaborate with the DDCMO on code corrections.

## SECTION 3: DEMIL PROGRAM ADMINISTRATION

**3.1. INTRODUCTION.** There is a risk that DoD personal property could be diverted into the hands of enemies of the United States as shown in Figure 1. To mitigate this risk, it is necessary to perform DEMIL on items being transferred out of DoD control except when permitted pursuant to specific legal authority.

Figure 1. Sources of Potential Diversion



**3.2. CONTROL DOD PERSONAL PROPERTY RELEASE WITH A DEMIL CODE.** In addition to the requirements in Volumes 6, 8, 9, 10, and 11 of DoDM 4140.01, the DoD Components will:

- a. Use the DEMIL code as one of the factors for management and control of DoD personal property.
- b. Use DEMIL codes to identify:
  - (1) Requirements to process excess materiel for release.
  - (2) Compatibility with the CIIC requirements in Tables 61 and 192 of the Federal Logistics Information System (FLIS) technical procedures found on the DLA website at

[http://www.dla.mil/HQ/Information Operations/Offers/Services/TrainingandReference](http://www.dla.mil/HQ/Information%20Operations/Offers/Services/TrainingandReference) in accordance with DoDM 4100.39.

(3) Items that require some degree of destruction because of their significant military nature (i.e., DEMIL).

(4) Excess DEMIL code "B" and sensitive DEMIL code "Q" items that require mutilation.

(5) Items for which only trade security control (TSC) measures are required.

c. Implement TSC in accordance with DoDI 2030.08 to reduce the risk of transferring property to unauthorized parties outside DoD control.

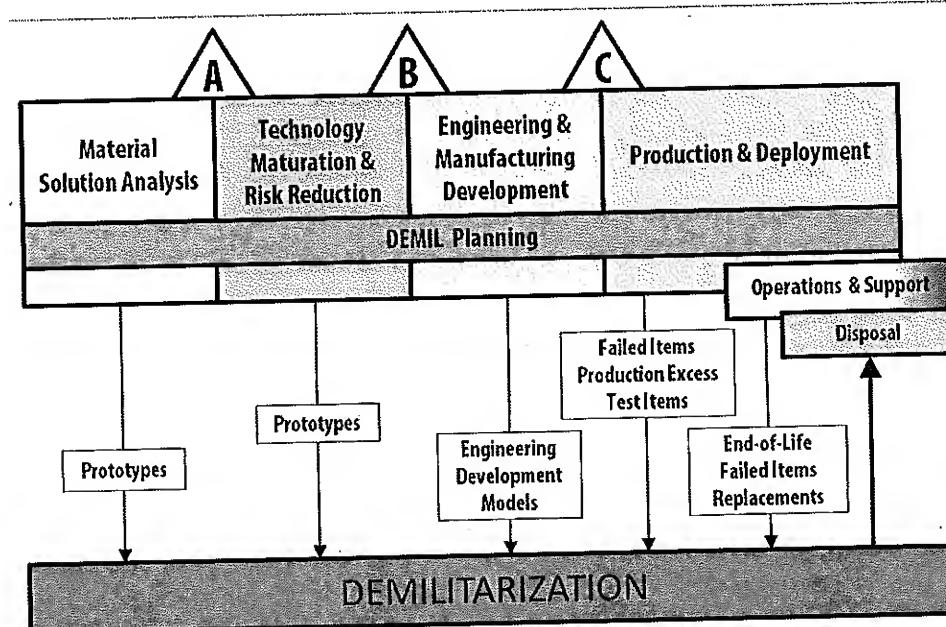
d. Apply TSCs to all DoD personal property, consistent with the assigned DEMIL code.

e. Review existing controls to identify and propose changes necessary to mitigate new or evolving risks.

f. Retain disposal documentation of demilitarized accountable personal property in accordance with DoDI 5000.64.

### **3.3. DEMIL AS A LIFE-CYCLE REQUIREMENT.**

a. DoD Components apply DEMIL requirements in all system life-cycle phases. They are not confined to the end of the system life-cycle. DoD Components will use Figure 2 to identify DEMIL requirements that arise during every life-cycle phase of the Defense Acquisition System discussed in DoDI 5000.02. Figure 2 reinforces the need for DEMIL to be a life-cycle consideration.

**Figure 2. DEMIL Within the Life-Cycle**

b. DoD Components will consider demilitarization requirements throughout a system's life.

- (1) Consider DEMIL as a system design factor, addressing ease of DEMIL and minimization of environmental, safety, and occupational health risks.
- (2) Use DEMIL as a risk mitigation action against reengineering where design features and capabilities can be obtained, including from non-functioning or damaged property.
- (3) Use DEMIL to reduce the risk of unfriendly parties using an item, even when the inherent design data does not need protection.
- (4) Consider DEMIL influences on physical security for storage and transportation when identifying the CIIC and their compatibility with DEMIL codes in accordance with Table 192 of the FLIS technical procedures found on the DLA website at <http://www.dla.mil/HQ/Information Operations/Offers/Services/TrainingandReference> in accordance with DoDM 4100.39.
- (5) Demilitarize DoD personal property promptly to take advantage of available knowledge and technical expertise, minimize storage costs, and reduce potential for loss or theft.
- (6) Reassess DEMIL requirements as items are modified throughout their life-cycle to meet operational requirements.
- (7) Consider DEMIL requirements even during obsolescence. What may be old to the United States may be useful to an unfriendly party.

(8) Recycle and dispose of demilitarized materiel in accordance with the procedures in Volume 1 of DoDM 4160.21.

(9) Address safety management and physical security requirements when identifying storage sites for ammunition and explosive DEMIL items.

**3.4. DDPO.** The DDPO:

- a. Administers the DoD DEMIL Program with DEMIL advocacy from the ASD(L&MR).
- b. Oversees the DoD DEMIL Program worldwide.
- c. Reviews DEMIL policy, procedures, program implementation, and operational performance for consistency with U.S. foreign policy, national security objectives, and DoD interests.
- d. Coordinates with the DoD DEMIL Life-Cycle Planning Center (DLPC), the DDCMO, and the Military Services (MILSVC) and Defense Agency DEMIL program administrators.
- e. Maintains the DLPC to support the DDPO in executing program responsibilities to improve life-cycle planning in accordance with this volume.
- f. Maintains currency of the DoD Demilitarization Program Course (DDPC) and appropriate DoD DEMIL training programs and evaluates and delivers updated training curriculum.
- g. Maintains and updates the DoD DEMIL Program website with the latest program information.
- h. Reviews and takes appropriate action on requests for waivers.
- i. Provides operational direction for the DDCMO's mission and functions as an integral part of the DDPO in accordance with DoDI 4160.28.
- j. Administers the DEMIL program in accordance with the procedures in this volume and the DoD DEMIL Program website.

**3.5. CONVENTIONAL AMMUNITION DEMIL.** The Secretary of the Army, or his or her designee, is the Single Manager for Conventional Ammunition (SMCA) in accordance with DoDI 5160.68. The SMCA manages DEMIL and disposal requirements for conventional ammunition. Pursuant to Section 4690 of Title 10, United States Code, the SMCA may carry out a program to sell recyclable munitions materiel resulting from the DEMIL of conventional military munitions. The organizational roles and responsibilities for project manager DEMIL are identified at <https://peoammo.army.mil/PMJointServices/Responsibilities.aspx>.

**3.6. DEMIL PROGRAM SUPPLEMENTARY GUIDANCE.** The DDPM provides supplementary guidance as needed to improve the process and when requirements change. The

supplementary guidance is available through the DoD DEMIL Program website at  
<https://demil.osd.mil>.

## SECTION 4: DEMIL TRAINING

**4.1. INTRODUCTION.** Training is critical to mitigate unacceptable risks when releasing DoD personal property to parties outside DoD control.

**4.2. FUNCTIONAL AREAS.** DoD Components must have knowledge of and proficiency in identifying the DEMIL, mutilation, and applicable release requirements early. Using the DEMIL code and integrity code (IC) relationship during the disposition process are vital to DoD's mitigation actions. DoD Components require DEMIL knowledge and proficiency:

- a. To make an initial determination, during the acquisition process, of the DEMIL requirements via DEMIL code assignment.
- b. To assign DEMIL codes and ICs during the disposition and physical DEMIL process.
- c. To direct where the materiel can be sent, the destruction action needed, and what TSCs are required for property and residue.

**4.3. DDPC.** The DDPM develops DDPC and an annual refresher course as the primary DEMIL training courses to address the DEMIL functional areas.

- a. DoD Components will use the DDPC and annual refresher courses posted at <https://demil.osd.mil> to train personnel who are responsible for:
  - (1) Determining item or system DEMIL requirements.
  - (2) Assigning, reviewing, or maintaining DEMIL codes.
  - (3) Administering the DEMIL program.
  - (4) Providing direct oversight of physical DEMIL.
- b. The list of candidates who usually have one or more of the responsibilities in Paragraph 4.3.a. are:
  - (1) Technical managers, engineers, and support activity personnel.
  - (2) Inventory planning personnel.
  - (3) Logistics, supply, and operations personnel.
  - (4) Equipment or product specialists.
  - (5) Investigators and TSC assessment personnel.
  - (6) Designated contracted logistics support personnel.

- (7) Property administrators.
- (8) Plant clearance officers.
- (9) Quality assurance specialists.
- (10) Termination contracting officers.
- (11) Sales contracting officers.
- (12) Maintenance management personnel.
- (13) Designated disposition authorities.
- (14) Accountable property officers as defined in DoDI 5000.64.

**4.4. RELATED TRAINING COURSES.** The DDPM will review other DEMIL training courses for effectiveness and compliance with DoD DEMIL policy and procedures. Information regarding related training courses endorsed by the DDPO is posted at <https://demil.osd.mil>.

## SECTION 5: DEMIL PLANNING GUIDANCE

### 5.1. INTRODUCTION.

- a. DEMIL planning early in the development of military systems is required by DoDI 4160.28 and is an important activity to reduce the risks of inadvertent release of DoD personal property. The earlier in the development cycle that materiel is released, the greater the potential for replication and countermeasures to be developed. DoD Components leverage from, and contribute to, other programmatic planning activities during DEMIL planning.
- b. DEMIL plans vary depending on the operational, logistical, and technical aspects of the system being addressed. PMs must tailor their plans based on the phase of the program and their strategies for DoD personal property disposition processing.
- c. The DEMIL plan is intended to address the challenges that can arise when personnel who do not have detailed knowledge of a system and its materiel content, hazards, and specific DEMIL and TSC requirements, must process the materiel for DEMIL, TSC, and disposal. This is especially important when older systems, for which system PMs may no longer be assigned and personnel with system knowledge are no longer available, are declared excess.
- d. DoD Components must:
  - (1) Generate a DEMIL plan for all defense acquisition programs prior to developmental test and evaluation and before releasing any new system or item to a non-military activity.
  - (2) Generate a DEMIL plan when making any major modification or upgrade to an existing defense system or item.
- e. The SMCA and MILSVC will develop DEMIL plans for conventional ammunition and explosives in accordance with DoDI 5160.68 and apply:
  - (1) Explosives safety management principles in accordance with DoDD 6055.09E.
  - (2) Ammunition and explosives physical security principles in accordance with DoDI 5100.76 and DoDM 5100.76.

### 5.2. RELATIONSHIPS WITH OTHER PROGRAM PLANNING ACTIVITIES.

- a. DEMIL analyses (e.g., coding, and implementation strategy and planning) must leverage other program activities to the maximum extent. Specific activities that may contribute to the DEMIL analysis include:
  - (1) Anti-tamper plans.
  - (2) Program protection plans (PPPs) and critical program information in the Defense Acquisition Security Database in accordance with DoDI 5200.39.

- (3) Program security guidelines.
  - (4) Programmatic, environmental, safety, and occupational analyses.
  - (5) Life-cycle sustainment plans, core logistics support plans requirements, determination, and assessments.
  - (6) Disposal plans.
  - (7) Information support plans in accordance with DoDI 5000.02 and DoDI 8330.01.
- b. To develop DEMIL procedures, DoD Components must maximize the use of existing data from:

- (1) Technical and operating manuals.
- (2) Safety data sheets.
- (3) Technical drawings.
- (4) Specifications.

### **5.3. DEMIL PLAN TYPES.** DoD Components will develop:

- a. Programmatic DEMIL plans that are tailored to each acquisition program as a standalone or integrated with other plans. DoD Components must develop the programmatic DEMIL plan early in an acquisition program that addresses:
  - (1) What tasks need to be performed.
  - (2) Who performs those tasks.
  - (3) How are those tasks performed.
  - (4) How are DEMIL tasks integrated with other disciplines.
  - (5) How is DEMIL information made available to users.
- b. Procedural DEMIL plans with information to support the performance of physical DEMIL. The plan is needed as soon as materiel will be subject to a disposal requirement but no later than initial fielding. DoD Components will use the procedural DEMIL plans to provide a DEMIL activity, regardless of item familiarity, with adequate procedures and guidance to accomplish the safe and environmentally acceptable DEMIL of any item. DoD Components will tailor the plan based on program-specific DEMIL performance strategies, available equipment and techniques, and the nature of the materiel. DoD Components develop procedural DEMIL plans to address:
  - (1) Special tools and equipment.

- (2) Personnel technical qualifications.
- (3) Technical procedures for:
  - (a) Disassembly.
  - (b) DEMIL code "G", "P", and "F" special requirements as listed in Volume 2 of DoDM 4160.28.
  - (c) DEMIL code "C" key point identification as listed in Volume 2 of DoDM 4160.28.
  - (d) Safety requirements.
  - (e) Certification and verification.
- (4) Data tables with:
  - (a) DEMIL codes for local stock number and national stock number (NSN) items.
  - (b) Related logistics information.
  - (c) Hazardous materiel.
- (5) Processes for disposition of DEMIL residue and non-DEMIL-required materiel.

**5.4. PRINCIPLES FOR DEVELOPING PROCEDURAL DEMIL PLANS.** The DoD Components will:

- a. Use existing maintenance related disassembly procedures in creating the plan. In some cases the system is partially disassembled before disposition.
- b. Start the plan, at a minimum, at the level of the assembled items and proceed in a top down fashion from the complete assembled item to disassembled item level.
  - (1) Consider disassembly as the lowest level where a DEMIL-required component exists.
  - (2) Write the plan to allow entry at the point of an individual subassembly or component to address DEMIL of spare and repair parts.
  - (3) Address the safety requirements related to the item and to the DEMIL processes for the item.
  - (4) Consider and address the environmental impact and liabilities associated with the disassembly and DEMIL processes.

c. Use existing reference documents, including technical manuals, to satisfy portions of plan requirements when possible. Identify the reference documents in the DEMIL plan to facilitate the review, approval, and implementing activities.

d. Update the DEMIL and disposal plans throughout the defense program life-cycle to include major program changes such as technology insertion, block upgrades, ordnance alterations, and approved engineering changes.

e. Encourage prompt DEMIL of all surplus and excess DoD personal property throughout the acquisition life-cycle including, but not limited to:

- (1) Advanced concept technology demonstration materiel.
- (2) Advanced development models.
- (3) Engineering development models.
- (4) Defective items and components.
- (5) Non-repairable items and components.
- (6) Any other acquisition program materiel.

f. Use a DEMIL plan with caution to demilitarize an item that is potentially hazardous or more hazardous due to damaged or deteriorated condition. Such items are the responsibility of appropriate environmental (in case of non-explosive) or explosive ordnance disposal (in case of explosive) teams who must develop their own particular DEMIL procedures.

g. Develop DEMIL plans for classified subassemblies or components in accordance with DoDI 8500.01 and Volume 3 of DoDM 5200.01.

h. Include alternative methods in a DEMIL plan, if possible, to allow for variations in equipment, tools, and skills that may be expected at organizations performing DEMIL.

##### **5.5. REVIEW AND DISTRIBUTION.** DoD Components will:

a. Complete DoD Component-specific reviews and approval requirements for DEMIL plans within an acquisition program. Ensure existing fielded programs comply with these guidelines to the maximum extent practical.

b. Make approved procedural plans available to the DDPO as requested to support DoD DEMIL program oversight and to entities performing physical DEMIL including DLA Disposition Services DEMIL divisions.

c. Post plans for materiels that do not have distribution restrictions on the DoD DEMIL Program website, as needed.

## SECTION 6: DEMIL CODE VALIDATION

**6.1. INTRODUCTION.** DoD Components use the DEMIL code validation as a quality control measure to verify the accuracy of DEMIL codes assigned to DoD personal property. The DDCMO administers the validation by assigning a code during the provisioning process, during the materiel disposition process, or at any time during the life-cycle of the item.

a. Following validation, DoD Components:

- (1) Must change the code for all like items entering the supply system.
- (2) Submit a request for review via the challenge process, if a code is potentially inaccurate.

b. The DDCMO:

- (1) Is responsible for the administration and maintenance of the DEMIL Code Challenge Program.
- (2) Administers the revision of DEMIL codes when the DOS or Department of Commerce revises export controls for items which are of low risk for release and which can be processed for release with the limited TSC measures applicable to EAR99 items identified in DoDI 2030.08.
- c. The inventory control point (ICP) is responsible for the timely resolution of items submitted for challenge.

**6.2. DEMIL ICS.** DEMIL ICs described in Table 1 appear adjacent to the DEMIL code in the FLIS. The DEMIL IC indicates the results of the validation. An accurate DEMIL code is one with an associated DEMIL IC of "1," "3," "6," or "7."

**Table 1. DEMIL ICs**

<b>DEMIL IC in the FLIS</b>	<b>DESCRIPTION</b>
BLANK	DEMIL code has not been reviewed by DCMO.
0	DEMIL code reviewed by DCMO. Recommended DEMIL code and current ICP DEMIL code are not equal. Presently in collaboration cycle.
1	DEMIL code reviewed by DCMO, recommended DEMIL code adopted by ICP, or no DEMIL code change recommended.
2	DEMIL code reviewed by DCMO and accepted by ICP (DEMIL IC "1") however, ICP has since overridden or changed code.

**Table 1. DEMIL ICs, Continued**

DEMIL IC in the FLIS	DESCRIPTION
3	Critical federal supply class (FSC) or federal supply group (FSG) munitions list item (MLI) or sensitive commerce control list item (CCLI). Requires mutilation worldwide.
4	DEMIL code could not be validated or there is insufficient technical data available.
5	Either: (1) Item reviewed and coded by Service or agency ICP without DCMO collaboration; or, (2) Service or agency ICP changed the DEMIL code prior to completion of DEMIL IC "0" review or collaboration cycle.
6	Non-critical FSC or FSG MLI or non-sensitive CCLI. Requires mutilation overseas.
7	Forced concurrence when the DCMO has forced a DEMIL code change in FLIS. ICP has not responded to collaboration request (over 90 days old) or failed to update the DEMIL code in the ICPs legacy system.
8	ICP has non-concurred with a DCMO recommended DEMIL Code. Item DEMIL coding pending resolution.
9	Reserved for future use.

a. DoD Components will initiate a lock on DEMIL codes with a DEMIL IC of "1," "3," "6," or "7," to prevent arbitrary changes. The ICP retains absolute authority to request a change provided the change is fully coordinated with the DDCMO for validation and concurrence.

b. To initiate a change to a DEMIL code lock that contains a DEMIL IC of "1," "3," "6," or "7," DoD Components will submit an e-mail to the DDCMO at DCMO@dla.mil through the applicable Military Department DEMIL Program for coordination and resolution. Identify the email in the subject line with "Locked DEMIL Code Recommendation," and include:

- (1) NSN.
- (2) Recommended DEMIL code.
- (3) Valid justification for the change with written supporting rationale based on the procedures in this volume and supporting documentation.
- (4) Point of contact information.

**6.3. DEMIL CODE CHALLENGE PROCESS.** The DDCMO will review all DEMIL code challenges, respond to challenge originators, and forward the challenge to the applicable ICP as appropriate to stop submissions of duplicate challenges.

a. Any individual or activity who has access to the DDCMO website at <http://www.dla.mil/HQ/InformationOperations/Offers/Services/FIC/DEMILCoding.aspx> may initiate DEMIL code challenges. DLA Disposition Services personnel generally submit DEMIL code challenges via the Distribution Standard System. Required entries for challenge submission are cited on the DDCMO website. Items identified within a critical FSG or FSC listed in Table 2 or by a key word listed in Table 3 can help personnel identify DEMIL code challenge candidates.

b. DDCMO will coordinate DEMIL code challenges with the appropriate Military Department for review prior to initiating any changes. The ICP must review the challenge and notify the DDCMO of the results of its review within 90 days of receipt. Military Departments may enter into memorandums of agreement with the DDCMO to improve coordination and processing of DEMIL challenge actions. The coordination process results are:

(1) Concurrence. If the ICP concurs with the challenge, the DDCMO must formally change the DEMIL code in the FLIS. DEMIL IC "1" reflects this transaction and registers in the historical file to preclude subsequent multiple challenges on the same item in supply. See Table 1 for a list of ICs.

(2) No Response. If the DDCMO does not receive a response from the ICP within the 90-day timeframe, then the DDCMO must formally change the DEMIL code in FLIS. A DEMIL IC of "7" reflects this transaction and flags the item as a forced concurrence.

(a) If the ICP and the DDCMO cannot agree on the appropriate DEMIL code for a challenge within 90-days of submission, the DDCMO must elevate the challenge in question to the DDPM and to the appropriate Military Department DEMIL program administrator for resolution.

(b) The DDPM and the Military Department DEMIL program administrator will collaborate and determine the appropriate DEMIL code.

(c) The DDPM will inform the DDCMO of his or her decision.

(d) The DDPM and Military Department DEMIL program administrator will coordinate with the ASD(L&MR) to resolve non-concurrences.

**6.4. CRITICAL FSGS, FSCS, AND KEY WORDS.** DoD Components can use the descriptions of critical FSGs and FSCs in Table 2 and key words in Table 3 as a guide to help determine whether an item requires DEMIL or is subject to TSC.

**Table 2. Critical FSGs or FSCs**

FSG or FSC	DESCRIPTION of CRITICAL FSGs and FSCs
10 (All)	Weapons
11 (All)	Nuclear Ordnance
12 (All)	Fire Control Equipment
13 (All)	Ammunition and Explosives

Table 2. Critical FSGs or FSCs, Continued

FSG or FSC	DESCRIPTION of CRITICAL FSGs and FSCs
14 (All)	Guided Missiles
1560	Airframe Structural Components
1670	Parachutes: Aerial Pick Up, Delivery, Recovery
1710	Aircraft Landing Equipment
1720	Aircraft Launching Equipment
1810	Space Vehicles
1820	Space Vehicle Components
1830	Space Vehicle Remote Control Systems
1840	Space Vehicle Launchers
1905	Combat Ships and Landing Vessels
2305	Ground Effect Vehicles
2330	Trailers
2350	Combat, Assault, and Tactical Vehicles, Tracked
2840	Gas Turbines and Jet Engines, Aircraft, Prime Moving; and Components
2845	Rocket Engines and Components
2915	Engine Fuel System Components, Aircraft and Missile Prime Movers
3690	Specialized Ammunition and Ordnance Machinery and Related Equipment
4230	Decontaminating and Impregnating Equipment
4470	Nuclear Reactors
4921	Torpedo Maintenance, Repair, and Checkout Specialized Equipment
4923	Depth Charges and Underwater Mines Maintenance, Repair, and Checkout Specialized Equipment
4925	Ammunition Maintenance, Repair, and Checkout Specialized Equipment
4927	Rocket Maintenance, Repair, and Checkout Specialized Equipment
4931	Fire Control Maintenance and Repair Shop Specialized Equipment
4933	Weapons Maintenance and Repair Shop Specialized Equipment
4935	Guided Missile Maintenance, Repair, and Checkout Specialized Equipment
4960	Space Vehicle Maintenance, Repair, and Checkout Specialized Equipment
5810	Communications Security Equipment and Components
5811	Other Cryptologic Equipment and Components
5820	Radio and Television Communication Equipment, Except Airborne
5821	Radio and Television Communication Equipment, Airborne
5825	Radio Navigation Equipment, Except Airborne
5826	Radio Navigation Equipment, Airborne
5840	Radar Equipment, Except Airborne

**Table 2. Critical FSGs or FSCs, Continued**

<b>FSG or FSC</b>	<b>DESCRIPTION of CRITICAL FSGs and FSCs</b>
5841	Radar Equipment, Airborne
5845	Underwater Sound Equipment
5850	Visible and Invisible Light Communication Equipment
5855	Night Vision Equipment, Emitted and Reflected Radiation
5860	Stimulated Coherent Radiation Devices, Components, and Accessories
5865	Electronic Countermeasures, Counter-Countermeasures, and Quick Reaction Capability Equipment
5963	Electronic Modules
5985	Antennas, Waveguides, and Related Equipment
5998	Electrical and Electronic Assemblies, Boards, Cards, and Associated Hardware
5999	Miscellaneous Electrical and Electronic Components
6615	Automatic Pilot Mechanisms and Airborne Gyro Components
6920	Armament Training Devices
6930	Operation Training Devices
6940	Communication Training Devices
8470	Armor, Personal
8475	Specialized Flight Clothing and Accessories

**Table 3. Key Words**

Key words in alphabetical order for items that may require DEMIL or are subject to TSC		
Ablative	Doppler	Mine
Accelerometer	Ejector	Missile
Afterburner	Electromagnetic Pulse	Modulator
Aiming Device	Electronic Countermeasures	Night Sight(ing)
Amphibious	Electronic Warfare	Nuclear
Amplifier	Electro-Optical	Optic(al)
Antenna	Encoder	Oscillator
Armor	Equilibrator	Particle Beam
Astro Compass	Feeder (ammunition)	Periscope
Attitude and Heading Reference Systems	Filter RF	Processor(ing)
Ballistic	Fire Control	Projectile
Beacon	Firing Mechanism	Pylon
Bomb(ing)	Frequency Generator	Radar
Breech	Guidance	Radome
Camouflage	Gunsighting	Range Finder
Carriage	Gyro(scope)	Receiver

Table 3. Key Words, Continued

Key words in alphabetical order for items that may require DEMIL or are subject to TSC		
Cartridge	Height Finder	Research and Development
Cathode Ray	Identification Friend or Foe	Scope
Chaff	Image Intensifier	Sight
Circuit Card Assembly	Inertial	Sonar
Classified	Infrared	Spotting Device
Cold Cathode	Interception	Spryton
Collimator	Klystron	Star Tracker
Composite	Krytron	Synchronizer
Communications Security	Laser	Target(ing)
Countermeasures	Launcher	Telescopic
Crypto	Linker or Delinker	Tempest

**6.5. DEMIL CODES FOR LOW RISK ITEMS.** The DDCMO under the guidance of the DDPM will use DEMIL code A for low risk items. Low risk items generally do not require an export license and are defined in the Glossary.

## SECTION 7: DEMIL WAIVERS

### 7.1. INTRODUCTION.

- a. DoD Components may request DEMIL waivers for:
  - (1) The method for DEMIL.
  - (2) The degree of DEMIL.
  - (3) The certification and verification requirements.
- b. DDPM may approve a waiver when the circumstances of the disposition reduce or mitigate the risks of release from DoD control.
- c. A waiver is not required when a disposition without DEMIL is approved under a specific legal or regulatory authority.

### 7.2. SUBMISSION AND REVIEW PROCESS.

DoD Components may submit a DEMIL waiver request:

- a. For a given DoD personal property disposition to the DDPM through command or contracting channels and the appropriate DoD Component or federal agency demilitarization program administrator.
- b. With an endorsement by mail or scanned and e-mailed to the contact information in Table 4.

**Table 4. DoD DEMIL Program Office Contact Information**

<b>Mail:</b>	DoD DEMIL Program Office
ATTN:	DEMIL Program Manager
	Defense Logistics Agency Headquarters STOP 6233
	8725 John J. Kingman Road
	Fort Belvoir, VA 22060-6221
<b>Email:</b>	DDPO@osd.mil

### 7.3. DISPOSITIONS WHERE DEMIL WAIVERS MAY BE REQUESTED.

DoD Components may request a DEMIL waiver for:

- a. **Exchange or Sale.** Exchange or sale transactions may involve a total or partial DEMIL waiver. The conditions for DLA's approval are that the entity receiving the DEMIL required property understands the concerns for release to the public or unauthorized export, and has the willingness and ability to manage the risks of unauthorized transfers.

**b. Burial.** Burial may be required when items are contaminated or damaged or otherwise present an uneconomical DEMIL cost. The conditions for approval are met if the burial property is a Government controlled landfill, the burial can be witnessed, access to the landfill is restricted, and requirements of DoDI 4715.06 are understood.

**c. Hazardous Waste.** Disposal processing where materiel is processed in batches and where witnessing is limited because of the risk from a possible occurrence of an accident, injury, or other adverse consequence that may be caused by the hazardous waste. Conditions for approval are that the materiel transport and processing is controlled.

**d. Museum Display.** Limited DEMIL to retain display value is also expected. Conditions for approval are that design features which should not be disclosed cannot be viewed, museum security controls are in place, and unsafe conditions are eliminated.

**e. Certification or Verification.** Waivers for certification or verification procedures may be requested with a description of risk factors and how the process will be controlled.

#### **7.4. DISPOSITIONS WHERE DEMIL WAIVERS WILL NOT BE GRANTED.** DoD Components should not submit a DEMIL waiver for DoD personal property if it is:

**a. Obsolete.** DoD personal property that is obsolete to U.S. requirements is often still of great value for use by unfriendly parties. Review DOS and Department of Commerce export regulations to see if they have been changed in a way that affects disposition requirements for obsolete property. DoD Component may request a reevaluation of a DEMIL code assignment for obsolete property that may no longer require DEMIL.

**b. Classified.** DEMIL waivers cannot be applied to classified items, when the classification aspects would be the subject of the waiver. Only in situations where classified aspects have been removed or destroyed, declassification has been certified, and further non-classified DEMIL requirements remain will a DEMIL waiver be considered.

#### **7.5. WAIVER REQUEST PACKAGES.** DoD Components will submit DEMIL waiver request packages with:

a. The type of disposition as described in Paragraph 7.3.

b. A description of the property with identifying information such as NSN, part number, model number, nomenclature, end-item application, the number of items, and unit of issue.

c. The DEMIL requirement.

(1) Identify the DEMIL code and whether the waiver is for the full DEMIL requirement or a portion of the DEMIL requirement.

(2) Include DEMIL certification for such property, as applicable.

d. A justification that explains how the risk to DoD is mitigated by addressing the conditions for approval in Paragraph 7.3.

#### **7.6. DEMIL WAIVERS AND TSCS FOR EXCHANGE OR SALE TRANSACTIONS.**

a. DoD Components will accomplish exchange or sale transactions in accordance with Part 102.39 of Title 41, Code of Federal Regulations (CFR), and Volume 9 of DoDM 4140.01. The process for DEMIL waivers is integrated with TSC requirements as shown in Figure 3.

b. DEMIL waiver and TSC packages for DEMIL C items require:

- (1) Signed DEMIL certificate.
- (2) Signed memo from MILSVC sent via MILSVC headquarters DEMIL coordinator.
- (3) Asset based sales package.
- (4) Properly completed DLA Form 1822, "End-use Certificate."

c. DEMIL waiver and TSC Packages for DEMIL code "Q6" items require:

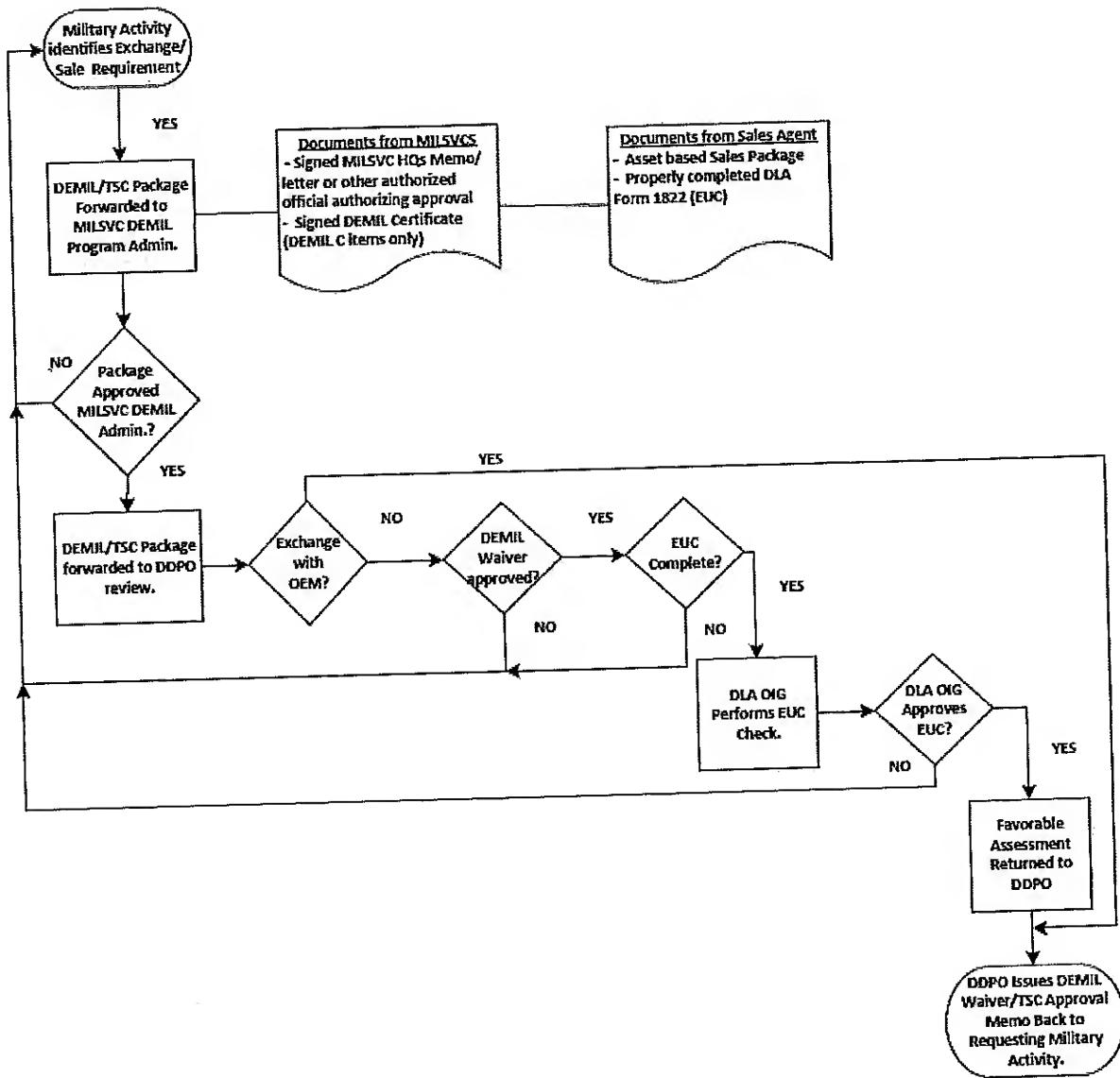
- (1) Signed MILSVC headquarters memo or letter.
- (2) Asset based sales package.
- (3) Properly completed DLA Form 1822.

d. DEMIL waiver and TSC packages for exchange or sales with the original equipment manufacturer do not require a DEMIL certificate or DLA Form 1822.

e. The sales package and DLA Form 1822 may be provided directly from the sales agent after the submissions of MILSVC documents.

f. Information on the DLA Form 1822 can be found on the DoD DEMIL Program website at <https://demil.osd.mil/>.

**Figure 3. DEMIL Waivers and TSCs for Exchange or Sale Transactions**



## GLOSSARY

### G.1. ACRONYMS.

ASD(L&MR)	Assistant Secretary of Defense for Logistics and Materiel Readiness
CCL	commerce control list
CCLI	commerce control list item
CFR	Code of Federal Regulations
CIIC	controlled inventory item code
DDCMO	DoD Demilitarization Coding Management Office
DDPC	Defense Demilitarization Program Course
DDPM	DoD Demilitarization Program Manager
DDPO	DoD Demilitarization Program Office
DEMIL	demilitarization
DLA	Defense Logistics Agency
DLPC	DoD Demilitarization Life-cycle Planning Center
DoDD	DoD directive
DoDI	DoD instruction
DoDM	DoD manual
DOS	Department of State
DSCA	Defense Security Cooperation Agency
EAR	Export Administration Regulations
FLIS	Federal Logistics Information System
FSC	federal supply class
FSG	federal supply group
IC	integrity code
ICP	inventory control point
MILSVC	Military Services
MLI	munitions list item
NSN	national stock number
PM	program manager
PPP	program protection plan
SMCA	Single Manager for Conventional Ammunition
TSC	trade security controls

USD(AT&amp;L)

Under Secretary of Defense for Acquisition, Technology, and  
Logistics

**G.2. DEFINITIONS.** Unless otherwise noted, these terms and their definitions are for the purpose of this issuance.

**ammunition and explosives.** Includes, but is not necessarily limited to, all items of U.S.-title (i.e., owned by the U.S. Government through the DoD Components) ammunition; propellants, liquid and solid; pyrotechnics; high explosives; guided missiles; warheads; devices; and chemical agent substances, devices, and components presenting real or potential hazards to life, property, and the environment. Excluded are wholly inert items and nuclear warheads and devices, except for considerations of storage and stowage compatibility, blast, fire, and non-nuclear fragment hazards associated with the explosives.

**anti-tamper plan.** Typically specifies DEMIL requirements. These plans may be an annex to the PPPs of programs with critical program information or may be approved as stand-alone documents in cases where they do not accompany a PPP.

**CCL.** Defined in Part 772.1 of Title 15, CFR.

**CCLI.** Items described in Part 774 of Title 15, CFR, also known as the CCL.

**defense article.** Defined in Section 120.6 of Title 22, CFR.

**defense service.** Defined in Section 120.9 of Title 22, CFR.

**DEMIL.** The act of eliminating the functional capabilities and inherent military design features from DoD personal property that requires certification and verification. Methods and degree range from removal and destruction of critical features to total destruction by cutting, crushing, shredding, melting, burning, etc. DEMIL is required to prevent property from being used for its originally intended purpose and to prevent the release of inherent design information that could be used against the United States. DEMIL applies to materiel in both serviceable and unserviceable condition.

**DEMIL code.** A code assigned to DoD personal property. It indicates the degree of required physical destruction, identifies items requiring specialized capabilities or procedures, and identifies items which do not require DEMIL but may require TSC. It is used throughout the life-cycle to identify control requirements required before release of DoD personal property from DoD control.

**disposal.** Defined in Volume 1 of DoDM 4160.21.

**diversion.** An unauthorized transfer (gift, resale, export, shipment, etc.) of materiel, including information, to individuals, entities, or countries.

**EAR.** Title 15, CFR, Parts 730 through 774, also known as the "Export Administration Regulations."

**EAR99 items.** A designator for items defined in the EAR in Subpart 774.1(a) of Title 15, CFR.

**explosives safety management.** The application of policies, regulations, procedures, standards, engineering, and resources that define a risk management process designed to:

Sustain operational capabilities and readiness.

Be cost effective.

Protect people, property, and the environment from accidents, injuries, and other adverse consequences that may be caused by DoD military munitions or other encumbering explosives or munitions.

Prevent accidents, injuries, and other adverse consequences that may be caused by DoD military munitions or other encumbering explosives or munitions.

**export.** Defined in DoDI 2030.08.

**key points (for DEMIL).** The parts, major components, alignment points, attachment fittings or areas of significant military equipment which, when demilitarized, cannot feasibly be repaired, restored, replaced, improvised or commercially procured and which are necessary factors in restoring the next higher assembly to design capability. Key points are typically assigned their own NSNs and are treated as DEMIL code "D."

**low risk items.** EAR99 items, and items described in Supplement number 1 of Part 774 of the EAR for which a determination that no license is required can be made for all destinations except those specifically listed in Country Groups D5, E1 and E2 of Supplement Number 1 to Part 740 of the EAR. Items designated EAR99, or items assigned to an Export Control Classification Number where the sole reason for control is anti-terrorism would qualify as being low risk.

**major components.** Components that are essential to the operation of an end-item and are key points for DEMIL.

**materiel.** Defined in Volume 1 of DoDM 4140.01.

**MLI.** Any item on the U.S. Munitions List in Part 121 of Title 22, CFR.

**mutilation.** The act of making non-DEMIL required MLI or CCLI unfit for its intended purpose by methods such as cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, or neutralizing, etc.

**personal property.** Defined in Volume 1 of DoDM 4160.21.

**property administrator.** Defined in Part 45 of Title 48, CFR.

**significant military equipment.** Defined in Parts 120-130 of Title 22, CFR.

**technical data.** Defined in Parts 120-130 of Title 22, CFR.

**TSC.** Defined in DoDI 2030.08.

**U.S. Munitions List.** Part 121 of Title 22, CFR which describes defense articles, defense services, and technical data controlled for export by the DOS.

## REFERENCES

- Code of Federal Regulations, Title 15  
Code of Federal Regulations, Title 22  
Code of Federal Regulations, Title 41  
Code of Federal Regulations, Title 48  
Defense Acquisition Guidebook<sup>1</sup>  
DoD Directive 5134.01, "Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L))," December 9, 2005, as amended  
DoD Directive 5134.12, "Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD(L&MR))," May 25, 2000, as amended  
DoD Directive 6055.09E, "Explosives Safety Management (ESM) and the DoD Explosives Safety Board," August 19, 2005 November 18, 2016, as amended  
DoD Instruction 2030.08, "Implementation of Trade Security Controls (TSC) for Transfers of DoD Personal Property to Parties Outside DoD Control," February 19, 2015  
DoD Instruction 4160.28, "DoD Demilitarization (DEMIL) Program," April 7, 2011  
DoD Instruction 4715.06, "Environmental Compliance in the United States," May 4, 2015  
DoD Instruction 5000.02, "Operation of the Defense Acquisition System," January 7, 2015  
DoD Instruction 5000.64, "Accountability and Management of DoD Equipment and other Accountable Property," May 19, 2011  
DoD Instruction 5100.76, "Safeguarding Sensitive Conventional Arms, Ammunition, and Explosives (AA&E)," February 28, 2014  
DoD Instruction 5160.68, "Single Manager for Conventional Ammunition (SMCA): Responsibilities of the SMCA, the Military Services, and United States Special Operations Command (USSOCOM)," December 29, 2008  
DoD Instruction 5200.39, "Critical Program Information (CPI) Identification and Protection Within Research, Development, Test, and Evaluation (RDT&E)," May 28, 2015  
DoD Instruction 5230.24, "Distribution Statements on Technical Documents," August 23, 2012, as amended  
DoD Instruction 8330.01, "Interoperability of Information Technology, including National Security Systems (NSS)," May 21, 2014  
DoD Instruction 8500.01, "Cybersecurity," March 14, 2014  
DoD Manual 4100.39, "Federal Logistics Information System (FLIS) Procedures Manual," March 8, 2017  
DoD Manual 4140.01, Volume 1, "DoD Supply Chain Materiel Management Procedures: Operational Requirements," February 10, 2014  
DoD Manual 4140.01, Volume 6, "DoD Supply Chain Materiel Management Procedures: Materiel Returns, Retention, and Disposition," March 8, 2017

<sup>1</sup> Found on Defense Acquisition University website <https://dag.dau.mil/Pages/Default.aspx>

DoD Manual 4140.01, Volume 8, "DoD Supply Chain Materiel Management Procedures: Materiel Data Management and Exchange," February 10, 2014

DoD Manual 4140.01, Volume 9, "DoD Supply Chain Materiel Management Procedures: Materiel Programs," October 17, 2016, as amended

DoD Manual 4140.01, Volume 10, "DoD Supply Chain Materiel Management Procedures: Supply Chain Inventory Reporting and Metrics," March 9, 2017

DoD Manual 4140.01, Volume 11, "DoD Supply Chain Materiel Management Procedures: Inventory Accountability and Special Management and Handling," March 8, 2017

DoD Manual 4160.21, Volume 1, "Defense Materiel Disposition: Disposal Guidance and Procedures," October 22, 2015

DoD Manual 4160.28, Volume 2, "Defense Demilitarization: Demilitarization Coding," March 9, 2017

DoD Manual 5100.76, "Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives (AA&E)," April 17, 2012

DoD Manual 5200.01, Volume 3, "DoD Information Security Program: Protection of Classified Information," February 24, 2012, as amended

Defense Security Cooperation Agency Manual 5105.38-M, "Security Assistance Management Manual," April 30, 2012

National Institute of Justice Standard 0108.01, "Ballistic Resistant Protective Materials," September 1985

United States Code, Title 10



# Department of Defense INSTRUCTION

**NUMBER** 2030.08  
February 19, 2015  
*Incorporating Change 1, May 24, 2017*

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USD(P)

**SUBJECT:** Implementation of Trade Security Controls (TSCs) for Transfers of DoD Personal Property to Parties Outside DoD Control

References: See Enclosure 1

1. **PURPOSE.** In accordance with the authority in DoD Directive (DoDD) 5111.1 (Reference (a)), this instruction:
  - a. Reissues DoD Instruction (DoDI) 2030.08 (Reference (b)) to establish policy and assign responsibilities to implement DoD TSC measures for transfers of DoD personal property to parties outside DoD control.
  - b. Reinforces DoD demilitarization (DEMIL) provisions in accordance with DoDI 4160.28 (Reference (c)) and DoD Manual (DoDM) 4160.28 (Reference (d)).
  - c. Reinforces DoD materiel disposition provisions in accordance with DoD 4160.21-M (Reference (e)).
  - d. Establishes TSC measures necessary to prevent unauthorized transfers of DoD export-controlled personal property to individuals, entities, or countries.

2. **APPLICABILITY.** This instruction applies to:

- a. The OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities in DoD (referred to collectively in this instruction as the "DoD Components").
- b. DoD export-controlled personal property to be transferred outside DoD control regardless of the authority upon which it is transferred, including exchange or sale and all other forms of transfer. (Additional policies and procedures that are specific to international transfers are found in DoDI 2040.02 (Reference (f)).)

- c. DoD export-controlled personal property controlled by contractors.
- d. DoD export-controlled personal property throughout the life cycle of the property, from initial acquisition and contracting phases (including pre-solicitations) through ultimate disposition.
- e. The disposal of DoD export-controlled personal property that was transferred on a government-to-government basis; for example, DoD personal property transferred to foreign governments via Foreign Military Sales and cooperative agreement or exchange channels.
- f. DoD export-controlled personal property in possession of other Federal agencies.

3. POLICY. It is DoD policy that:

- a. All transfers of DoD export-controlled personal property, within or outside the United States, will be conducted pursuant to:
  - (1) Section 2778 of Title 22, United States Code (U.S.C.), also known as the "Arms Export Control Act (AECA)" (Reference (g)), as implemented in parts 120 through 130 of Title 22, Code of Federal Regulations (CFR), also known and referred to in this instruction as the "International Traffic in Arms Regulations (ITAR)" (Reference (h)).
  - (2) Chapter 35 of Title 50, U.S.C. (Reference (i)), as implemented in parts 730 through 774 of Title 15, CFR, also known and referred to in this instruction as the "Export Administration Regulations (EAR)" (Reference (j)).
  - (3) Sections 2301- 2349bb of Reference (g).
  - (4) Parts 500 through 598 of Title 31, CFR, also known as the "Office of Foreign Assets Control Regulations" (Reference (k)).
  - (5) Part 101-42.1102 of Title 41, CFR (Reference (l)).
  - (6) Any similar applicable regulations issued by any Federal agency.
- b. DoD export-controlled personal property will not be transferred to the control or possession of a foreign person or ineligible transferee unless authorized by statute, under regulations issued by the Secretary of State, the Secretary of Commerce, or the Secretary of the Treasury or other authority.
- c. DoD programs for the transfer of DoD export-controlled personal property will be administered to ensure that transfers comply with applicable export control laws and regulations

(the AECA, ITAR, EAR and References (i) and (k)), DoD DEMIL instructions (References (c) through (e)), and DEMIL regulations (part 101-42.1102 of Reference (l)).

d. DoD Components must apply appropriate TSC measures, including those required at Enclosure 3, to prevent unauthorized exports or transfers of DoD export-controlled personal property. These measures must be applied throughout the entire lifecycle of DoD export-controlled personal property, which includes all acquisition phases (including pre-solicitation activities), sustainment, and ultimate disposal.

e. TSC measures will be implemented, as appropriate, in coordination with programs established by the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)); the Defense Security Cooperation Agency (DSCA); the Defense Technology Security Administration (DTSA); the Directorate of Defense Trade Controls (DDTC) at the Department of State (DOS); the U.S. Immigration and Customs Enforcement at the Department of Homeland Security (DHS); the Bureau of Industry and Security at the Department of Commerce (DOC); and the Office of Foreign Assets Control at the U.S. Department of the Treasury (USTD).

f. Transfers of DoD personal property at locations outside of the United States must also comply with applicable foreign laws, regulations, and international agreements.

g. All DoD activities and personnel will report known or suspected violations of U.S. export laws and regulations for investigation in accordance with DoDD 5106.01 (Reference (l)), DoDI 5505.2 (Reference (n)), the ITAR and EAR References (g) through (k). Failure to report such violations to the appropriate authorities may result in criminal or civil penalties.

4. RESPONSIBILITIES. See Enclosure 2.

5. PROCEDURES. See Enclosure 3 for required DoD TSC measures. These measures are critical, but may not be the only procedures necessary for DoD Components to comply with this instruction.

6. RELEASABILITY. *Cleared for public release*. This instruction is available on the Internet from the DoD Issuances Website at <http://www.dtic.mil/whs/directives>.

7. EFFECTIVE DATE. This instruction is effective February 19, 2015.

Christine E. Wormuth  
Under Secretary of Defense for Policy

Enclosures

1. References
2. Responsibilities
3. Procedures

Glossary

TABLE OF CONTENTS

ENCLOSURE 1: REFERENCES .....	6
ENCLOSURE 2: RESPONSIBILITIES .....	8
UNDER SECRETARY OF DEFENSE FOR POLICY (USD(P)) .....	8
DIRECTOR, DSCA .....	8
DIRECTOR, DTSA .....	8
USD(AT&L) .....	8
ASSISTANT SECRETARY OF DEFENSE FOR LOGISTICS AND MATERIEL READINESS (ASD(L&MR)) .....	8
DIRECTOR, DEFENSE LOGISTICS AGENCY (DLA) .....	8
DoD COMPONENT HEADS.....	9
ENCLOSURE 3: PROCEDURES .....	10
GENERAL .....	10
REQUIRED GENERAL MEASURES FOR DoD COMPONENTS.....	10
REQUIRED MEASURES FOR DoD COMPONENTS WHEN TRANSFERRING DoD USML OR CCL PERSONAL PROPERTY .....	11
REQUIRED MEASURES FOR DoD COMPONENTS WHEN TRANSFERRING EAR99 ITEMS.....	11
REQUIRED MEASURES FOR DoD COMPONENTS DURING SOLICITATION, CONTRACT AWARD, AND ADMINISTRATION ACTIVITIES.....	12
GLOSSARY .....	13
PART I: ABBREVIATIONS AND ACRONYMS .....	13
PART II: DEFINITIONS.....	14

ENCLOSURE 1REFERENCES

- (a) DoD Directive 5111.1, "Under Secretary of Defense for Policy (USD(P)),," December 8, 1999
- (b) DoD Instruction 2030.08, "Implementation of Trade Security Controls (TSC) for Transfers of DoD U.S. Munitions List (USML) and Commerce Control List (CCL) Personal Property to Parties Outside DoD Control," May 23, 2006 (hereby cancelled)
- (c) DoD Instruction 4160.28, "DoD Demilitarization (DEMIL) Program," April 7, 2011
- (d) DoD Manual 4160.28, "Defense Demilitarization," June 7, 2011
- (e) DoD *Manual 4160.21-M*, "Defense Materiel Disposition Manual," August 18, 1997 *October 22, 2015*
- (f) DoD Instruction 2040.02, "International Transfers of Technology, Articles, and Services," March 27, 2014
- (g) Title 22, United States Code
- (h) Title 22, Code of Federal Regulations, Subchapter M, parts 120 through 130, also known as the "International Traffic in Arms Regulations"
- (i) Title 50, United States Code, chapter 35 also known as the "International Emergency Economic Powers Act"
- (j) Title 15, Code of Federal Regulations, Subchapter C, parts 730 through 774, also known as the "Export Administration Regulations"
- (k) Title 31, Code of Federal Regulations, parts 500 through 599, also known as the "Office of Foreign Assets Control Regulations"
- (l) Title 41, Code of Federal Regulations
- (m) DoD Directive 5106.01, "Inspector General of the Department of Defense (IG DoD)," April 20, 2012, as amended
- (n) DoD Instruction 5505.02, "Criminal Investigations of Fraud Offenses," August 29, 2013, *as amended*
- (o) Defense Security Cooperation Agency 5105.38-M, "Security Assistance Management Manual," April 30, 2012
- (p) DoD Directive 5105.72, "Defense Technology Security Administration (DTSA)," *July 28, 2005-April 26, 2016*
- (q) DoD Instruction 4140.01, "DoD Supply Chain Materiel Management Policy," December 14, 2011
- (r) DoD Instruction 5230.24, "Distribution Statements on Technical Documents," August 23, 2012, *as amended*
- (s) DoD Directive 5230.25, "Withholding of Unclassified Technical Data From Public Disclosure," November 6, 1984, as amended
- (t) DoD Instruction 5230.29, "Security and Policy Review of DoD Information for Public Release," August 13, 2014
- (u) DoD Manual 5200.01, Volume 4, "DoD Information Security Program: Controlled Unclassified Information (CUI)," February 24, 2012
- (v) DoD Manual 5200.45, "Instructions for Developing Security Classification Guides," April 2, 2013

- (w) DoD 4100.39-M, Volume 10, "Federal Logistics Information System (FLIS) Procedures Manual: Multiple Application References/Instructions/Tables and Grids," October 2010
- (x) DoD DEMIL and Trade Security Controls Program Website, "Procedures and Guidance, Trade Security Controls," <https://demil.osd.mil/tscguid.aspx>.
- (y) Defense Federal Acquisition Regulation Supplement, current edition
- (z) Defense Federal Acquisition Regulation Supplement Procedures, Guidance, and Information, current edition

ENCLOSURE 2RESPONSIBILITIES

1. UNDER SECRETARY OF DEFENSE FOR POLICY (USD(P)). The USD(P) establishes policy for the transfer of DoD export-controlled personal property according to applicable U.S. laws, regulations, and policies.
2. DIRECTOR, DSCA. Under the authority, direction, and control of the USD(P) and in addition to the responsibilities in section 7 of this enclosure, the Director, DSCA, develops written procedures, in coordination with DOS, to implement TSC policy for DoD export-controlled personal property transfers administered by DSCA. These procedures will be incorporated in DSCA 5105.38-M (Reference (o)), and address the DEMIL and disposal of property transferred by the DoD to a foreign government pursuant to Foreign Military Sales, Military Assistance, Grant Aid, or other DSCA-administered programs.
3. DIRECTOR, DTSA. Under the authority, direction, and control of the USD(P) and in addition to the responsibilities in section 7 of this enclosure, the Director, DTSA, proposes updates for this instruction to the USD(P), consistent with DoDD 5105.72 (Reference (p)).
4. USD(AT&L). The USD(AT&L) has overall responsibility for management of the DoD TSC Program and issues supplemental guidance as appropriate.
5. ASSISTANT SECRETARY OF DEFENSE FOR LOGISTICS AND MATERIEL READINESS (ASD(L&MR)). Under the authority, direction, and control of the USD(AT&L), the ASD(L&MR):
  - a. Provides management oversight of the DoD TSC Program.
  - b. Issues supplemental guidance, as appropriate, for the DoD implementation of TSC measures and policy for DoD personal property.
6. DIRECTOR, DEFENSE LOGISTICS AGENCY (DLA) In addition to the responsibilities in section 7 of this enclosure, and under the authority, direction, and control of the ASD(L&MR), the Director, DLA:
  - a. Manages the DoD TSC Program to implement DLA TSC responsibilities in accordance with this instruction and DoDI 4140.01 (Reference (q)). In coordination with the ASD(L&MR) and the DoD Component heads, also:
    - (1) Maintains the DoD TSC Program Office.

- (2) Develops supplemental TSC implementation guidance for DoD Components.
  - (3) Maintains a DoD TSC training program.
  - (4) Maintains the DoD TSC website as a resource for DoD Components to implement TSC policy.
  - (5) Conducts TSC assessments for DLA and other DoD Components as requested.
  - (6) Maintains DLA's TSC Enforcement and Investigative Program.
- b. Ensures that all dispositions of DoD export-controlled personal property under DLA's control are executed in accordance with this instruction.
- c. In coordination with ASD(L&MR), provides guidance, training, and assistance to other DoD Components for the implementation of TSC policy and measures.

7. DoD COMPONENT HEADS. The DoD Component heads:

- a. Ensure their Component's compliance with this instruction.
- b. Carry out TSC measures in Enclosure 3 and the applicable supplemental measures and guidance issued by the USD(AT&L) or ASD(L&MR) for the transfer of DoD export-controlled personal property.
- c. Establish and implement additional measures that are necessary to comply with this instruction.
- d. Support their fellow DoD Components to develop and implement DoD TSC policy, guidance, and procedures, including:
  - (1) Help the Director, DTSA, develop DoD TSC policy.
  - (2) Participate in DoD TSC working groups.
  - (3) Help the Director, DLA, and the ASD(L&MR) develop supplemental TSC measures and guidance.

ENCLOSURE 3PROCEDURES

1. GENERAL. These key TSC measures must be carried out by all DoD Components to comply with this instruction, so that only authorized individuals gain access to or possession of DoD export-controlled personal property.

2. REQUIRED GENERAL MEASURES FOR DoD COMPONENTS

- a. Assign proper DEMIL codes for managed inventory items, at the inception of the acquisition cycle, in accordance with Volume 2 of Reference (d).
- b. Limit access to DoD export-controlled personal property.
- c. Prevent unauthorized visual or oral disclosure of DoD export-controlled personal property to foreign persons, in the United States or abroad, when such disclosure would constitute an export in accordance with the EAR or the ITAR.
- d. Properly mark and protect unclassified technical data with distribution statements, and disseminate in accordance with DoDI 5230.24 (Reference (r)), DoDD 5230.25 (Reference (s)), DoDI 5230.29 (Reference (t)), Volume 4 of DoDM 5200.01 (Reference (u)), and DoDM 5200.45 (Reference (v)).
- e. Properly DEMIL or mutilate DoD U. S. Munitions List (USML) and Commerce Control List (CCL) personal property as required by Reference (d), before release from DoD control, unless it is being transferred pursuant to an authorized exception.
- f. Property to be transferred as scrap must not contain useable or salvageable end-items, components, accessories, attachments, parts, firmware, software, systems, or associated technology that are DoD USML or CCL personal property.
  - (1) In rare instances, even though there are no recognizable parts, items, or components, certain types of scrap materials may be listed on the USML or CCL (generally when the material itself is controlled) and may require DOS or DOC authorization for transfers to foreign entities or for transfers within foreign countries.
  - (2) Similarly, scrap that is listed on the USML or CCL requires a TSC assessment.
  - (3) Further guidance on the limited instances of export controls for scrap is at References (e), (j), and section 102-36 of Reference (k).
- g. In addition to other guidance provided, adhere to the following policies and regulations, and use the resources as applicable, to implement this instruction: Reference (q), part 101-42 of

Reference (l), DoD 4100.39-M (Reference (w)), and the DoD DEMIL and Trade Security Controls Program Website (Reference (x)).

- h. Implement applicable supplementary DoD TSC, DEMIL, or sales policy measures.
- i. Establish and carry out additional component-specific measures as necessary to comply with this instruction.

**3. REQUIRED MEASURES FOR DoD COMPONENTS WHEN TRANSFERRING DoD USML OR CCL PERSONAL PROPERTY**

- a. Perform TSC assessments before transferring DoD USML or CCL personal property.

(1) DoD USML and CCL personal property must not be transferred directly or indirectly to any person or entity unless it has been determined eligible after a TSC assessment conducted by the DLA. This requirement does not apply to transfers under government-to-government agreements or similar programs when recipients are assessed by other means, for example, in accordance with Reference (f), or when transfers are made to other federal agencies pursuant to Reference (l) or similar authorities.

(2) The assessment must determine the eligibility and suitability of recipients to possess or control the further disposition of DoD USML or CCL personal property and include inquiries to verify the destination and proposed use of transferred DoD USML or CCL personal property.

b. Execute written agreements, signed by recipients of DoD USML and CCL personal property, to comply with the terms and conditions for the use of the property, including their responsibility to comply with U.S. export control laws and regulations. Examples of agreements are sales contracts, contract awards, Foreign Military Sales agreements, and end use certificates.

c. Execute written agreements with other federal agencies receiving DoD USML or CCL personal property pursuant to Reference (l), that require the recipient to handle DoD personal property in compliance with this policy.

d. Check for required export licenses or other authorizations prior to relinquishing custody of DoD USML or CCL personal property. This only applies when recipients have indicated an intention to export DoD personal property.

**4. REQUIRED MEASURES FOR DoD COMPONENTS WHEN TRANSFERRING EAR99 ITEMS.** Recipients of DoD EAR99 personal property must agree in writing to comply with U.S. export control laws and regulations. DoD Components should refer recipients in writing to the EAR, and provide them the guidance and information in subchapter C, parts 732, 746, and 736. Exports of these items may require licenses when destined to certain prohibited entities or destinations.

**5. REQUIRED MEASURES FOR DoD COMPONENTS DURING SOLICITATION, CONTRACT AWARD, AND ADMINISTRATION ACTIVITIES**

- a. Review technical data during pre-solicitation, solicitation, and contract processes to ensure that it is appropriately marked in accordance with Reference (r), and that export-controlled data is released only to authorized parties in accordance with the EAR, the ITAR, Reference (k), and References (s), (t), and (f).
- b. Convey appropriate instructions to DoD contractors and offerors to ensure proper handling and destruction of DoD USML and CCL personal property (which includes equipment, materials, technical data, technology, and software) during pre-solicitation, solicitation, and contract award and administration activities.
- c. Appropriately investigate potential offerors and awardees to ensure they are authorized recipients of DoD USML technical data and CCL technology in accordance with the ITAR, the EAR, Reference (k), and Reference (w).
- d. Incorporate appropriate terms and conditions into DoD contracts to ensure that DoD contractors handle DoD export-controlled personal property in their custody, consistent with this instruction and in accordance with subparts 245.604-3, 225.7901, and 204.73 of the Defense Federal Acquisition Regulation Supplement (DFARS) (Reference (y)). The contracting officer should review the related DFARS Procedures, Guidance, and Information (Reference (z)), and include in applicable contracts and solicitations, DFARS clauses 252.225-7048 and 252.204-7012.

## GLOSSARY

### PART I. ABBREVIATIONS AND ACRONYMS

AECA	Arms Export Control Act
ASD(L&MR)	Assistant Secretary of Defense for Logistics and Materiel Readiness
CCL	Commerce Control List
CFR	Code of Federal Regulations
DDTC	Directorate of Defense Trade Controls
DEMIL	demilitarization
DFARS	Defense Federal Acquisition Regulation Supplement
DLA	Defense Logistics Agency
DHS	Department of Homeland Security
DOC	Department of Commerce
DoDD	DoD Directive
DoDI	DoD Instruction
DoDM	DoD Manual
DOS	Department of State
DSCA	Defense Security Cooperation Agency
DTSA	Defense Technology Security Administration
EAR	Export Administration Regulations
ITAR	International Traffic in Arms Regulations
TSC	trade security controls
U.S.C.	United States Code
USD(AT&L)	Under Secretary of Defense for Acquisition, Technology, and Logistics
USD(P)	Under Secretary of Defense for Policy
USML	United States Munitions List
USTD	United States Department of the Treasury

## PART II. DEFINITIONS

Unless otherwise noted, these terms and their definitions are for the purposes of this instruction.

CCL. Defined in part 772 of the EAR. The CCL is at supplement No. 1 to part 774 of the EAR.

CCL technology and software. Defined in part 772 of the EAR.

defense article. Defined in subpart 120.6 of the ITAR.

defense service. Defined in subpart 120.9 of the ITAR.

DEMIL. Defined in Reference (d).

DEMIL code. Defined in Reference (d).

disposition. The process of reutilizing, donating, selling, ultimately disposing, or otherwise transferring DoD personal property.

DoD export-controlled personal property. DoD personal property that is controlled for export on the ITAR or the EAR. These items (including articles, items, technical data, technology, and software) are identified on the USML, CCL, or are subject to the EAR, e.g., "EAR99".

DoD personal property. All DoD property (including technical data, technology, and software) except real property (land, improvements, buildings, etc.) and government records. DoD excess, surplus, and foreign excess personal property are a subset of DoD personal property defined in Reference (e).

DoD TSC. DoD policy and measures to implement TSC.

DoD USML or CCL personal property. DoD personal property that is listed either on the USML (including equipment, materials, technical data (which includes software), and defense services subject to the ITAR), or listed on the CCL (including equipment, materials, technology, and software, and controlled pursuant to the EAR). This does not include EAR99 items.

EAR99. Defined in subpart 774.1 of the EAR.

end use certificate. A statement by a prospective purchaser or transferee indicating the intended destination and disposition of DoD USML and CCL personal property to be purchased or transferred and acknowledging U.S. export license requirements and DoD TSCs.

export. Defined in subpart 120.17 of the ITAR, for ITAR-controlled items, and in subpart 772.1 of the EAR, for EAR-controlled items.

foreign excess personal property. Defined in Reference (e).

foreign person. Defined in subpart 120.16 of the ITAR.

ineligible transferees. Individuals, entities, or countries:

Excluded from federal programs by the General Services Administration as identified in the System for Award Management at <https://www.sam.gov/portal/public/SAM/>.

Subject to denial, debarment, or other sanctions pursuant to export control and related laws, regulations, or orders administered by the DOS, DOC, DHS, or USTD. The DOS, DOC, DHS, and USTD name these entities, individuals, and countries in the Federal Register and at the following websites:

DOS DDTDC Debarred Parties Website at  
[http://www.pmddtc.state.gov/compliance/debar\\_intro.html](http://www.pmddtc.state.gov/compliance/debar_intro.html); DOS DDTDC Embargoed Countries Website [http://www.pmddtc.state.gov/embargoed\\_countries/index.html](http://www.pmddtc.state.gov/embargoed_countries/index.html)

DOC Denied Persons List Website at <http://www.bis.doc.gov/dpl/thedeniallist.asp> and  
DOC Unverified List Website at  
[http://www.bis.doc.gov/enforcement/unverifiedlist/unverified\\_parties.html](http://www.bis.doc.gov/enforcement/unverifiedlist/unverified_parties.html)

USTD Specially Designated Nationals List Website at <http://www.treasury.gov/resource-center/sanctions/SDN-List/Pages/default.aspx> which includes designated narcotics traffickers and designated terrorists, USTD Sanctions Program Website at  
<http://www.treasury.gov/resource-center/sanctions/Programs/Pages/Programs.aspx>

Supplementary information on additional lists that should be consulted to identify ineligible transferees can be found at the DoD DEMIL and Trade Security Controls Program Website.

mutilation. Defined in Volume 1 of Reference (d).

scrap. Recyclable, waste, and discarded materials derived from items that have been rendered useless beyond repair, rehabilitation, or restoration such that the item's original identity, utility, form, fit, and function have been destroyed. Items classified as scrap can be processed by cutting, tearing, crushing, mangling, shredding, or melting. Intact or recognizable USML or CCL items, components, and parts are not scrap. In rare instances, even though there are no recognizable parts, items, or components, certain types of scrap materials may be listed on the USML or CCL (generally specific alloys). Further guidance is at References (e), (j), and section 102-36 of Reference (l).

technology. Defined in Reference (f).

transfer. The sale, lease, loan, grant, exchange, trade, barter, release, or donation from the DoD to another person or entity outside of DoD control. Transfers can include, but are not limited to: military sales, surplus property sales, foreign excess property sales or donations, research collaboration, exchanges, consulting arrangements, co-development and co-production arrangements, exhibits, meetings and symposia, technical missions, employment, dissemination of patent information, release of technical reports and technical data, illicit acquisition of

technology or articles, and access through ownership or substantial interest in a business or other organization.

TSC. The controls on export or other transfers, DEMIL, or mutilation of DoD personal property established by the EAR, ITAR, AECA, section 2301- 2349bb of Reference (g), References (i), (k), part 101-42.1102 of Reference (l), and any similar controls established by the DHS.

TSC assessment. A pre-award assessment made by DoD, usually by DLA, verifying that the destination, end-user, and end-use of controlled DoD personal property conform to U.S. export control requirements.

TSC measures. Measures designed to preclude the improper or unauthorized transfer of DoD export-controlled personal property.

USML technical data. Defined in subpart 120.10 of the ITAR.

U.S. person. Defined in subpart 120.15 of the ITAR.

United States. Defined in subpart 120.13 of the ITAR.



## DoD MANUAL 4160.28, VOLUME 2

### DEFENSE DEMILITARIZATION: DEMILITARIZATION CODING

**Originating Component:** Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics

**Effective:** March 9, 2017

*Change 1 Effective:* December 1, 2017

**Releasability:** Cleared for public release. Available on the DoD Issuances Website at <http://www.dtic.mil/whs/directives>.

*Cleared for public release. This Manual is available on the Directives Division Website at <http://www.esd.whs.mil/DD/>.*

**Reissues and Cancels:** DoD Manual 4160.28, Volume 2, "Defense Demilitarization: Demilitarization Coding," June 7, 2011

**Approved by:** Kristin French, Principal Deputy Assistant Secretary of Defense for Logistics and Materiel Readiness Performing the Duties of the Assistant Secretary of Defense for Logistics and Materiel Readiness

*Change 1 Approved by:* Judy Dahlgren, Director for Administration, for the Assistant Secretary of Defense for Logistics and Material Readiness

**Purpose:** This manual is composed of several volumes, each containing its own purpose. In accordance with the authority in DoD Directive (DoDD) 5134.01 and DoDD 5134.12 and the policy in DoD Instruction (DoDI) 4160.28:

- This manual implements policy, assigns responsibilities, and provides procedures for assessing demilitarization (DEMIL) requirements and performing physical DEMIL of DoD personal property.
- This volume assigns responsibilities and prescribes procedures for assigning DEMIL codes for DoD personal property.

## TABLE OF CONTENTS

<b>SECTION 1: GENERAL ISSUANCE INFORMATION .....</b>	<b>4</b>
1.1. Applicability. ....	4
<b>SECTION 2: RESPONSIBILITIES .....</b>	<b>5</b>
2.1. Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD(L&MR)) ..	5
2.2. Director, Defense Logistics Agency (DLA). ....	5
2.3. DoD Component Heads. ....	5
2.4. Secretaries of the Military Departments and Commandant of the U.S. Coast Guard. ....	5
<b>SECTION 3: DEMIL CODING .....</b>	<b>6</b>
3.1. Introduction.....	6
3.2. DEMIL Code Assignment Overview.....	7
a. General.....	7
b. Preparatory Information.....	7
c. Table Specific.....	8
d. Specially Designed.....	8
3.3. DEMIL Code Assignment Process.....	8
<b>SECTION 4: DEMIL CODING OF CCL ITEMS .....</b>	<b>103</b>
4.1. Assigning DEMIL Codes To Non-Military CCL Items.....	103
a. Introduction.....	103
b. ECCNs.....	103
c. Control Under the EAR.....	104
d. Finding an ECCN.....	105
e. DEMIL Coding of Non-Military or Non-Spacecraft CCL Items.....	106
4.2. Sensitive and Non-sensitive CCLI.....	106
<b>GLOSSARY .....</b>	<b>108</b>
G.1. Acronyms.....	108
G.2. Definitions.....	110
<b>REFERENCES .....</b>	<b>113</b>

### TABLES

Table 1. DEMIL Codes.....	6
Table 2. Steps for Determining DEMIL Codes .....	9
Table 3. Firearms, Close Assault Weapons, and Combat Shotguns .....	11
Table 4. Guns and Armament .....	13
Table 5. Ammunition and Ordnance.....	16
Table 6. Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines.....	19
Table 7. Explosives and Energetic Materials, Propellants, Incendiary Agents, and their Constituents.....	25
Table 8. Surface Vessels of War and Special Naval Equipment .....	29
Table 9. Ground Vehicles .....	34
Table 10. Aircraft and Related Articles .....	40
Table 11. Military Training Equipment .....	48

Table 12. Personal Protective Equipment.....	51
Table 13. Military Electronics .....	54
Table 14. Fire Control, Laser, Imaging, and Guidance Equipment.....	65
Table 15. Materials and Miscellaneous Articles .....	73
Table 16. Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment .....	78
Table 17. Spacecraft and Related Articles .....	84
Table 18. Nuclear Weapons Related Articles .....	90
Table 19. Classified Articles, Technical Data, and Defense Services Not Otherwise Listed.....	91
Table 20. Directed Energy Weapons .....	92
Table 21. Gas Turbine Engines and Associated Equipment.....	94
Table 22. Submersible Vessels and Related Articles.....	99
Table 23. Articles, Technical Data, and Defense Services Not Otherwise Listed.....	102
Table 24. CCL Categories.....	103
Table 25. CCL Product Groups .....	104
Table 26. CCL Primary Reason (or Reasons) for Control.....	104

## FIGURES

Figure 1. DEMIL Code Assignment Process.....	9
Figure 2. Example of an ECCN .....	103
Figure 3. Example of an ECCN Heading.....	105
Figure 4. Example of Related Controls.....	105
Figure 5. Example of Items Header .....	106
Figure 6. Example of Items Controlled in ECCN Heading .....	106
Figure 7. EAR99 Statement .....	106
Figure 8. Sensitivity Based on Reasons for Control .....	107

## SECTION 1: GENERAL ISSUANCE INFORMATION

### 1.1. APPLICABILITY. This volume:

- a. Applies to OSD, the Military Departments (including the Coast Guard at all times, including when it is a Service in the Department of Homeland Security by agreement with that Department), the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this issuance as the “DoD Components”).
- b. Does not apply to nuclear material controlled by the Defense Threat Reduction Agency, technical data controlled under DoDI 5230.24 or DoD Manual (DoDM) 5200.01 (except when included on an item of supply such as labels), or software.

## SECTION 2: RESPONSIBILITIES

- 2.1. ASSISTANT SECRETARY OF DEFENSE FOR LOGISTICS AND MATERIEL READINESS (ASD(L&MR)).** Under the authority, direction, and control of the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)), and consistent with DoDD 5134.12, the ASD(L&MR) implements the DoD DEMIL program.
- 2.2. DIRECTOR, DEFENSE LOGISTICS AGENCY (DLA).** Under the authority, direction, and control of the USD(AT&L), through the ASD(L&MR), and in addition to the responsibilities in Paragraph 2.3, the Director, DLA:
- a. Provides guidelines for the identification and DEMIL of DoD personal property to prevent its unauthorized use and the potential compromise of U.S. national security.
  - b. Evaluates program deficiencies and advances in technology in coordination with the Defense Technology Security Administration and recommends changes to lists of defense articles requiring DEMIL and other controls.
  - c. Establishes DEMIL instructions in a readily available location for every DLA-managed item with a national item identification number that requires such instructions.
- 2.3. DOD COMPONENT HEADS.** The DoD Component heads:
- a. Use the procedures in this volume to determine DEMIL codes.
  - b. Ensure that this volume is implemented across their respective Components in a uniform, consistent manner.
- 2.4. SECRETARIES OF THE MILITARY DEPARTMENTS AND COMMANDANT OF THE U.S. COAST GUARD.** In addition to the responsibilities in Paragraph 2.3, the Secretaries of the Military Departments and Commandant of the U.S. Coast Guard:
- a. Assign an accurate DEMIL code to every item of DoD personal property for which each Military Department has management responsibility.
  - b. Develop DEMIL instructions and post them in a readily available location for every managed national item identification number that requires such instructions.

## SECTION 3: DEMIL CODING

**3.1. INTRODUCTION.** DoD Components will:

- a. Evaluate all DoD personal property for DEMIL requirements.
  - b. Assign one of the nine DEMIL codes in Table 1 to DoD personal property in accordance with the code assignment process in Paragraph 3.3.
- (1) Table 1 accommodates revisions to the U.S. Munitions List (USML) and Commerce Control List (CCL) that reflect changes being addressed by the Department of State and the Department of Commerce (DOC) as part of the export control reform initiative. Notably, this includes the shifting of some DEMIL required military items from the USML to the CCL.

**Table 1. DEMIL Codes**

Code	DEMIL Requirements
G	USML or CCL Military Items – <b>DEMIL required</b> – ammunition and explosives (AE). This code applies to both unclassified and classified AE items.
P	USML Items – <b>DEMIL required</b> . Security classified items.
F	USML or CCL Military Items – <b>DEMIL required</b> . Item managers, equipment specialists, or product specialists must furnish special DEMIL instructions.
D	USML or CCL Military Items – <b>DEMIL required</b> . Destroy item and components to prevent restoration or repair to a usable condition.
C	USML or CCL Military Items – <b>DEMIL required</b> . Remove or demilitarize installed key point(s) items as DEMIL code “D.”
E	DoD DEMIL Program Office reserves this code for its exclusive-use only. DEMIL instructions must be furnished by the DoD DEMIL Program Office.
B	USML Items – Mutilation (MUT) to the point of scrap required worldwide.
Q	Commerce Control List Item (CCLI) – MUT to the point of scrap required outside the United States. Inside the United States, MUT is required when the DEMIL integrity code (IC) is “3” and MUT is not required when the DEMIL IC is “6.”
A	Items subject to the Export Administration Regulations (EAR) in parts 730-774 of Title 15, Code of Federal Regulations (CFR) (CCLI or EAR99) and determined by the DoD to present a low risk when released out of DoD control. No DEMIL, MUT, or end use certificate is required. May require an export license from DOC.

- (2) Table 1 also reflects items that may not require physical DEMIL but will require the lesser disposition policy driven control of MUT, as well as items that only require trade security control measures upon release from DoD control.

- c. Post the DEMIL code for national stock number (NSN) items to the Federal Logistics Information System upon completion of the provisioning process in accordance with DoD 4100.39-M.
- d. For non-NSN items, store the DEMIL code in acquisition program-managed inventory management systems.
- e. Comply with trade security controls in accordance with DoDI 2030.08 for all DoD export-controlled personal property.

### **3.2. DEMIL CODE ASSIGNMENT OVERVIEW.**

**a. General.** The process for determining the DEMIL code that best characterizes the DEMIL requirements for an item is represented by the code assignment process in Paragraph 3.3. This overview provides general information about the process, table specific information, and preparatory information needed before starting the process.

- (1) DoD Components must assign DEMIL codes for end items as well as parts components, accessories, and attachments for the given end item.
- (2) When NSNs are required, DoD Components will assign the DEMIL code needed to support the provisioning process as the DEMIL code is a required data element for entry into the Federal Logistics Information System. In other cases, when an NSN is not required, a DEMIL code will still be required before the first disposition for that item.
- (3) DoD Components will:
  - (a) Assign a DEMIL code to an item based on its technical characteristics.
  - (b) Use the DEMIL code assignment process in Paragraph 3.3 to determine the appropriate DEMIL code at the time of procurement or NSN assignment.
  - (c) Conduct a DEMIL code review after changes have been made that alter the original technical characteristics of an item, e.g., field hardware modifications or loading of classified data or software. Apply DEMIL code changes only to the items that have been altered and not to the original NSN or part number. Accomplish a re-identification of the item or altered items to a new NSN or part number.
  - (d) Include research and development material and partially complete materials when evaluating DEMIL requirements. Research and development material is often unique, will not have an NSN assigned, and may not have the extent of documentation available for a production version. Partially complete materials may arise due to discontinuation of a manufacturing process or as an outcome of a repair or parts cannibalization process.

**b. Preparatory Information.** Before starting the coding process, coders will:

- (1) Review the general characteristics (e.g., item name, end item application, classification, and material content) of the item.

(2) Collect additional technical information (e.g., range, payload, operating frequency) as needed to address the technical criteria in Tables 3 to 23.

**c. Table Specific.**

(1) Review Tables 3 to 23 to determine which DEMIL coding table provides the best description for the end item. Components, accessories, and attachments will usually appear in the same tables as that of the end item. However, this is not always true. A notable example is an aircraft gas turbine engine that is found in Table 21, "Gas Turbine Engines and Associated Equipment," rather than in Table 10, "Aircraft and Related Articles."

(2) Coders will use the DEMIL codes in Tables 3 to 23 as a recommendation. A coder must evaluate each item using the DEMIL code assignment process in Paragraph 3.3 before assigning a DEMIL code to the item.

(3) Coders will apply the recommended DEMIL codes of "C," "D," "F," "P," or "G" in Part I of Tables 3 to 23 to items which are preceded by a black diamond symbol (♦) which designates significant military equipment (SME). The designation as SME provides coders with the correlation of the tables to the DoDI 4160.28 policy requirements for the DEMIL before release of SME. Recommended DEMIL codes are also provided for the coders to consider for all other items with significant military utility that are not designated with a diamond as SME.

**d. Specially Designed.** Coders identify specially designed items by using Tables 3 to 23 in a catch and release process. Coders catch an item if it is used in or with an item listed in the Tables 3 to 23 and consider the item as specially designed. Coders release an item from being considered specially designed if the item:

(1) Is, regardless of form or fit, a fastener (e.g., screw, bolt, nut, nut plate, stud, insert, clip, rivet, pin), washer, spacer, insulator, grommet, bushing, spring, wire, or solder; or

(2) Has the same function, performance capabilities, and the same (or equivalent) form and fit, as another item that is used in or with an item that is or was in production, and:

(a) Is used in or with an item that is not in Tables 3 to 23, or

(b) Is in Part 2 of Tables 3 to 23 and the indicated export control classification number (ECCN) is controlled by the DOC for anti-terrorism reasons only.

**3.3. DEMIL CODE ASSIGNMENT PROCESS.** DLA and the Military Departments will assign DEMIL codes using the process illustrated in Figure 1, steps described in Table 2, and supporting information in Tables 3 to 23.

Figure 1. DEMIL Code Assignment Process

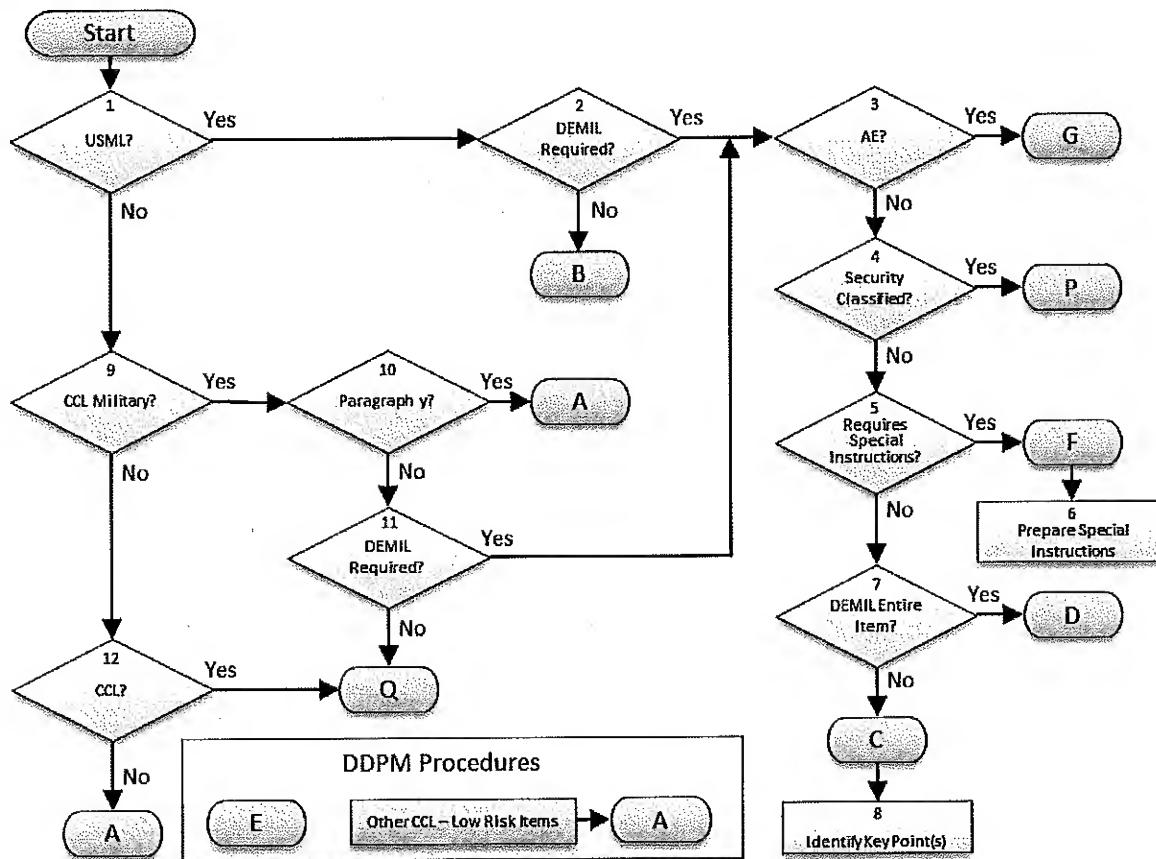


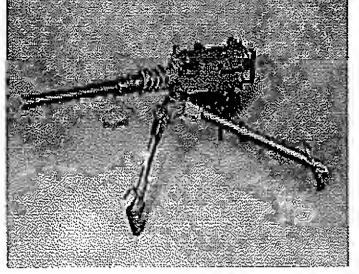
Table 2. Steps for Determining DEMIL Codes

<b>Review the general characteristics of the item before Step 1.</b>
<b>Step 1:</b> Is the item described in Part 1 of the applicable table?
1a. Review Tables 3 to 23 to locate the table which best fits the end item.
1b. Determine which DEMIL coding table provides the best description for the end item as described in the DEMIL Coding Tables 3 to 23
1b. If the item is listed in Part 1 of one of the tables, go to Step 2; if not, go to Step 9.
<b>Step 2:</b> Does the item require DEMIL?
2a. Determine if item is described with a recommended DEMIL code of "C," "D," "F," "P," or "G."
2b. If yes, go to Step 3; if no, assign DEMIL code "B."
<b>Step 3:</b> Is the item either security classified or unclassified AE?
AE includes, but is not necessarily limited to, all items of U.S.-titled (i.e., owned by the U.S. Government through the DoD Components) ammunition; propellants, liquid and solid; pyrotechnics; high explosives; guided missiles; warheads; devices; and chemical agent substances, devices, and components presenting real or potential hazards to life, property, and the environment.
3a. Based on item technical and logistics information, determine if it can be defined as AE.
3b. If item is AE assign DEMIL code "G"; if the item is not AE, go to Step 4.
<b>Step 4:</b> Is the item security classified?

**Table 2. Steps for Determining DEMIL Codes, Continued**

4a. Determine the item's security classification from the systems original classification authority issued security classification guidelines or other derived technical and logistics information. The ability to process or store classified data alone is not sufficient to assign DEMIL code "P."
4b. If the item's classification level is CONFIDENTIAL or higher assign DEMIL code "P"; if not, go to Step 5.
<b>Step 5:</b> Determine if the item requires special DEMIL instructions
5a. Assess whether item contains hazardous constituents that will cause environmental or personnel safety risks during physical performance of DEMIL. (See item's technical and logistics information or the item's safety data sheet for hazardous constituents.)
5b. Assess whether item presents a physical safety hazard which would create a personnel safety risk during physical performance of DEMIL. (See item technical information and procedures for potential safety hazards.)
5c. If item contains hazardous constituents or presents a physical safety hazard or requires occupational expertise, assign DEMIL code "F" and go to Step 6 and prepare special instructions. If not, go to Step 7.
<b>Step 6:</b> Prepare Special Instructions.
See <a href="https://demil.osd.mil">https://demil.osd.mil</a> for information on DEMIL instruction development guidelines for DEMIL code "F" items.
<b>Step 7:</b> Determine if the entire item requires destruction.
If item requires destruction, assign DEMIL code "D"; if not, assign DEMIL code "C" and go to Step 8.
<b>Step 8:</b> Identify key points for DEMIL
8a. Review the definition of key points for DEMIL in this volume.
8b. See Section 3 of Volume 3 of DoDM 4160.28 and review for examples of key points.
<b>Step 9:</b> Is the item a CCL military item described in Part 2 of Tables 3 to 23 or a spacecraft item in Part 2 of Table 17?
Not all tables have a Part 2. Tables with a Part 2 list military items on the CCL as 600 series ECCNs or spacecraft items as ECCNs 9x515 for Table 17.
9a. Review DEMIL coding Tables 3 to 23.
9b. If the item is listed in Part 2 of Tables 6 to 13, 15, 17, or 20 to 22, go to Step 10; if not listed, go to Step 12.
<b>Step 10:</b> Is the item described in Paragraph (y), Part 2 of Tables 3 to 23?
10a. Determine if the item is described in Paragraph (y), Part 2 of Tables 8 to 10, 12 to 15, 21, or 22 and also meets the definition of specially designed.
10b. If yes, assign DEMIL code "A." If no, continue to Step 11. Items in Paragraph (y), Part 2 of Tables 3 to 23 are controlled for export under the EAR for reasons of anti-terrorism and may be eligible for export with no license required as long as they are not going to restricted parties.
<b>Step 11:</b> Does item require DEMIL?
11a. Determine if item is described with a DEMIL code of "C," "D," "F," or "G."
11b. If yes, go to Step 3; if no, assign DEMIL code "Q."
<b>Step 12:</b> Is the item on the CCL under a non-600 series ECCN?
12a. Review the ECCNs on the CCL in Part 774 of Title 15, CFR.
12b. Determine if the item is specified on the CCL under a specific ECCN.
12c. If a specific ECCN applies, assign DEMIL code "Q," and if not, assign DEMIL code "A."

**Table 3. Firearms, Close Assault Weapons, and Combat Shotguns**

		
<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
<b>Military items described in the USML Category I</b>		
<ul style="list-style-type: none"> <li>♦ (a) Non-automatic and semi-automatic firearms up to and including .50 caliber (12.7 millimeters (mm)).</li> </ul>		D
<ul style="list-style-type: none"> <li>♦ (b) Fully automatic firearms up to .50 caliber (12.7mm).</li> </ul>		D
<ul style="list-style-type: none"> <li>♦ (c) Firearms or other weapons (e.g., insurgency-counterinsurgency and close assault weapons systems) having a special military application regardless of caliber.</li> </ul>		D
<ul style="list-style-type: none"> <li>♦ (d) Combat shotguns. This includes any shotgun with a barrel length less than 18 inches.</li> </ul>		D
<ul style="list-style-type: none"> <li>♦ (e) Silencers, mufflers, and sound and flash suppressors for the articles listed in this table and their specifically designed, modified, or adapted components and parts.</li> </ul>		D
<ul style="list-style-type: none"> <li>(f) Riflescopes manufactured to military specifications. DEMIL codes for night sighting devices are located in Paragraph (c) of Table 14.</li> </ul>		D
<ul style="list-style-type: none"> <li>♦ (g) Barrels, cylinders, receivers (frames), or complete breech mechanisms for the articles listed in this table.</li> </ul>		D
<ul style="list-style-type: none"> <li>(h) Major components, parts, accessories, and attachments specifically designed or modified for the articles listed in this table. For example, includes but is not limited to:           <ul style="list-style-type: none"> <li>(1) Gun mounts including bipods or tripods.</li> <li>(2) Magazine.</li> <li>(3) Metallic parts and components.</li> </ul> </li> </ul>		D
<ul style="list-style-type: none"> <li>(i) Decals, labels, and technical manuals containing technical data directly related to the items listed in this table described as either:           <ul style="list-style-type: none"> <li>(1) Classified or</li> <li>(2) Unclassified</li> </ul> </li> </ul>		P D
<ul style="list-style-type: none"> <li>(j) Minor components, parts, accessories, attachments, and associated equipment specifically designed or modified for the articles listed in this table and not otherwise listed in Paragraphs (a) through (h) of this table.</li> </ul>		B

**Table 3. Firearms, Close Assault Weapons, and Combat Shotguns, Continued**

Description of items for DEMIL coding	DEMIL Code
(k) Non-combat shotguns, pyrotechnic pistols, starter guns, and ground signal projectors.	D
(l) Military test equipment containing DEMIL required components listed in Tables 3 through 23.	C
(m) Military test equipment not containing components listed in Tables 3 through 23.	B

**Table 4. Guns and Armament**

<b>Description of items for DEMIL coding</b>	<b>DEMIL Code</b>
<b>Guns and armament described in USML Category II</b>	
♦ (a) Guns over .50 caliber (12.7mm), whether towed, airborne, self-propelled, or fixed, including, but not limited to, howitzers, mortars, cannons, recoilless rifles and grenade launchers.	C
(b) Flame throwers specifically designed or modified for military applications.	C
(c) Apparatus and devices for launching or delivering ordnance, other than those articles described in Table 6.	C
♦ (d) Kinetic energy weapon systems specifically designed or modified for destruction or rendering mission-abort of a target. The kinetic energy weapons systems include but are not limited to: <ul style="list-style-type: none"> <li>(1) Coil guns.</li> <li>(2) Homing seeker, guidance, or divert propulsion (lateral acceleration) systems for projectiles.</li> <li>(3) Launch systems and subsystems capable of accelerating masses larger than 0.1 grams to velocities in excess of 1.6 kilometers (km) per second, in single or rapid-fire modes, using methods such as electromagnetic, electrothermal, plasma, light gas, or chemical.</li> <li>(4) Mass drivers.</li> <li>(5) Prime power generation, electric armor, energy storage, thermal management; conditioning, switching or fuel-handling equipment; and the electrical interfaces between power supply gun and other turret electric drive function.</li> <li>(6) Railguns.</li> <li>(7) Ram accelerators.</li> <li>(8) Target acquisition, tracking fire control, or damage assessment systems.</li> </ul>	D
(e) Signature control materials (e.g., parasitic, structural, coatings, screening), techniques, and equipment specifically designed, developed, configured, adapted, or modified to alter or reduce the signature (e.g., muzzle flash	D

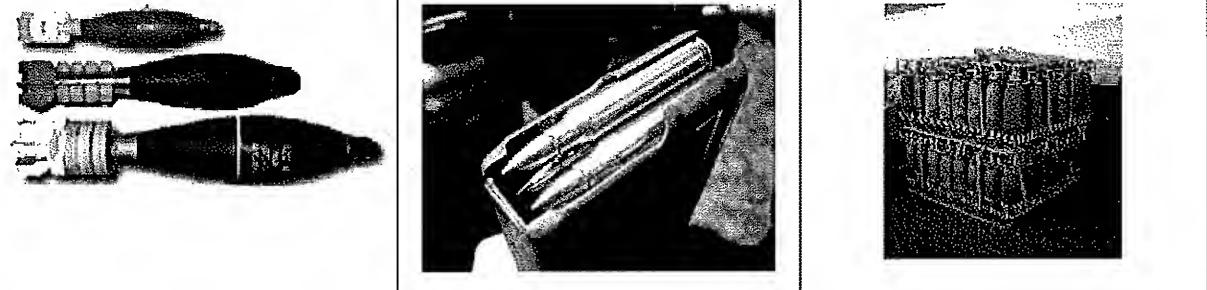
**Table 4. Guns and Armament, Continued**

Description of items for DEMIL coding	DEMIL Code
suppression, radar, infrared, visual, laser or electro-optical, acoustic) of defense articles in this table.	
♦ (f) Engines specifically designed or modified for the self-propelled guns and howitzers in this table.	D
(g) Tooling and equipment specifically designed or modified for the production of defense articles in this table.	D
(h) Test and evaluation equipment and test models specifically designed or modified for the defense articles in this table. This includes, but is not limited to, diagnostic instrumentation and physical test models.	C
(i) Autoloading systems for electronic programming of projectile function for the defense articles in this table.	C
(j) Major components, parts, accessories, and attachments specifically designed for the defense articles in this table. This includes but is not limited to:	D
(1) Armor plates.	D
(2) Breechblocks.	D
(3) Breech chambers.	D
(4) Breech couplings.	D
(5) Breech housings.	D
(6) Breechplugs.	D
(7) Breechrings.	D
(8) Breechyokes.	D
(9) Buffer mechanisms.	D
(10) Equilibrators (must be demilitarized before turn-in for disposition).	F
(11) Feeder mechanisms (including those for auto-cannon).	D
(12) Firing mechanisms.	D
(13) Flame hiders.	D
(14) Flame thrower operating mechanisms.	D
(15) Gun carriages.	D
(16) Gun mounts.	D
(17) Muzzle breaks.	D
(18) Receivers.	D
(19) Recoil mechanisms (must be demilitarized before turn-in for disposition).	F
(20) Recuperators (must be demilitarized before turn-in for disposition).	F

**Table 4. Guns and Armament, Continued**

Description of items for DEMIL coding	DEMIL Code
(21) Release mechanisms.	D
(22) Trunnion blocks.	D
(23) Tubes and gun barrels to include liners and sleeves.	D
(24) Turret rings.	D
(k) Decals, labels and technical manuals containing technical data directly related to the items listed in this table described as either:	
(1) Classified or	P
(2) Unclassified.	D
(l) Minor components, parts, accessories, attachments, and associated equipment specifically designed or modified for the articles listed in this table and not otherwise listed in Paragraphs (a) through (k) of this table.	B
(m) Military test equipment containing DEMIL required components listed in Tables 3 through 23.	C
(n) Military test equipment not containing components listed in Tables 3 through 23.	B
<b>INTERPRETATIONS.</b> The defense articles in this table include any end item, component, accessory, attachment part, firmware, software, or system designed or manufactured using technical data and defense services in this table.	

**Table 5. Ammunition and Ordnance**

		<b>DEMIL Code</b>
<b>Description of items for DEMIL coding</b>		
<b>Ammunition and ordnance as described in USML Category III</b>		
♦ (a) Ammunition and ordnance for the defense articles listed in Tables 3 and 4.		G
(b) Ammunition and ordnance handling equipment specifically designed or modified for the defense articles in this table, such as belting, linking, and de-linking equipment.		D
(c) Equipment and tooling specifically designed or modified for the production of defense articles in this table.		D
(d) Major components, parts, accessories, attachments, and associated equipment specifically designed or modified for the defense articles in this table. This includes, but is not limited to:		D
(1) Ammunition manufacturing and loading machines.		D
(2) Armor piercing ammunition, cores, and components.		G
(3) Cartridges.		G
(4) Detonating devices for ammunition.		G
♦ (5) Guidance and control components for the defense articles in this table.		C
(6) Incendiary ammunition agents; except those having dual military and commercial use.		G
(7) Metallic and composite sabots.		D
(8) Primers and components.		G
(9) Rotating bands.		D
(10) Specialized containers that are not found in Table 15, ECCN 0A617 Paragraph (y)(3).		D
♦ (11) Non-explosive safing, arming, and fuzing components (including target detection and localization devices) for the defense articles listed in this table.		D

**Table 5. Ammunition and Ordnance, Continued**

Description of items for DEMIL coding	DEMIL Code
(e) Decals, labels, and technical manuals containing technical data directly related to the items listed in this table described as either:	
(1) Classified or (2) Unclassified.  This includes blueprints, drawings, photographs, plans, instructions, or documentation.	P D
(f) Projectiles over .50 caliber that have had their energetic material removed.	D
(g) Minor components, parts, accessories, attachments, and associated equipment specifically designed or modified for the articles listed in this table and not otherwise listed in Paragraphs (a) through (h) of this table.	B
(h) Military test equipment containing DEMIL required components listed in Tables 3 to 23	C
(h) Military test equipment not containing components listed in Tables 3 to 23.	B

**INTERPRETATIONS:**

The components, parts, accessories, and attachments for the defense articles described in this table include, but are not limited to:

- Cartridge cases.
- Powder bags (or other propellant charges).
- Bullets.
- Jackets.
- Cores.
- Shells (excluding shotgun shells).
- Projectiles (including canister rounds and submunitions).
- Boosters.
- Firing components.
- Primers.
- Other detonating devices for the defense articles described in this table.

The defense articles listed in this table include any end item, component, accessory, attachment, part, firmware, software, or system designed or manufactured using technical data and defense services in this table.

The articles specifically designed or modified for military application described in this table include any article specifically developed, configured, or adapted for military application.

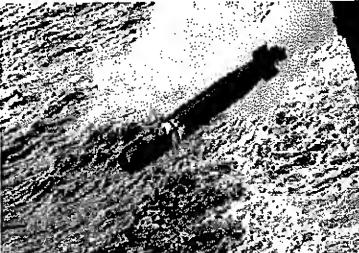
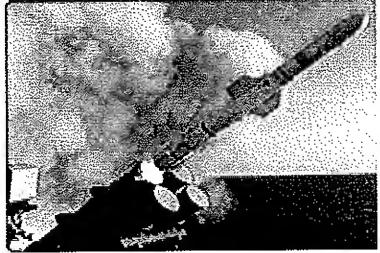
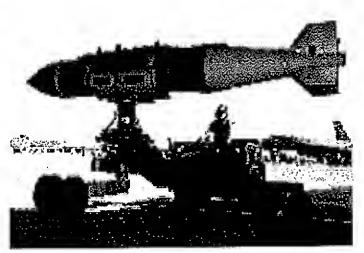
**EXCLUSIONS.** This table does not control expended cartridge cases for items in Paragraphs (a) and (b) of Table 3. See Volume 3 of this manual for special processing of expended cartridge cases.

**Table 5. Ammunition and Ordnance, Continued**

This table does not apply to cartridge and shell casings that, before release from DoD control, have been rendered useless beyond the possibility of restoration for use as a cartridge or shell casing by means of heating, flame treatment, mangling, crushing, cutting, or popping.

Equipment and tooling in this table does not include equipment for hand-loading ammunition and similar items in ECCN 0B986 covered by the EAR in accordance with Parts 730-774 of Title 15, CFR.

**Table 6. Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines**

  		DEMIL Code
Description of items for DEMIL coding		
<b>Part 1. Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines Items described in USML Category IV</b>		
♦ (a) Rockets, space launch vehicles (SLVs), missiles, bombs, torpedoes, depth charges, mines, and grenades:		
(1) Rockets, SLVs, and missiles capable of delivering at least a 500 kilogram (kg) payload to a range of at least 300 km.	G	
(2) Rockets, SLVs, and missiles capable of delivering less than a 500 kg payload to a range of at least 300 km.	G	
(3) Man-portable air defense systems (MANPADS).	G	
(4) Anti-tank missiles and rockets.	G	
(5) Rockets, SLVs, and missiles not matching the description in Paragraphs (a)(1) through (a)(4).	G	
(6) Bombs.	G	
(7) Torpedoes.	G	
(8) Depth charges.	G	
(9) Anti-personnel, anti-vehicle, or anti-armor land mines (e.g., area denial devices).	G	
(10) Anti-helicopter mines.	G	
(11) Naval mines.	G	
(12) Fragmentation and high explosive hand grenades.	G	
♦ (b) Launchers for rockets, SLVs, and missiles:		
(1) Fixed launch sites and mobile launcher mechanisms for any system listed in Paragraphs (a)(1) and (a)(2).	C	
(2) Fixed launch sites and mobile launcher mechanisms for any system listed in Paragraphs (a)(3) through (a)(5) (e.g., launch tables, tube-launched, optically tracked, wire-guided missile, MANPADS).	C	

**Table 6. Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines, Continued**

Description of items for DEMIL coding	DEMIL Code
(c) Apparatus and devices specially designed for the handling, control, activation, monitoring, detection, protection, discharge, or detonation of the defense articles listed in Paragraphs (a) and (b).	D
<p>♦ (d) Rocket, SLV, and missile power plants:</p> <ul style="list-style-type: none"> <li>(1) Except as listed in Paragraph (d)(2) or (d)(3), individual rocket stages for the defense articles listed in Paragraph (a)(1), (a)(2), or (a)(5). G</li> <li>(2) Solid propellant rocket motors, hybrid or gel rocket motors, or liquid propellant rocket engines having a total impulse capacity equal to or greater than <math>1.1 \times 10^6</math> Newton second (N•s). G</li> <li>(3) Solid propellant rocket motors, hybrid or gel rocket motors, or liquid propellant rocket engines having a total impulse capacity equal to or greater than <math>8.41 \times 10^5</math> N•s, but less than <math>1.1 \times 10^6</math> N•s. G</li> <li>(4) Combined cycle, pulsejet, ramjet, or scramjet engines. D</li> <li>(5) Air-breathing engines that operate above Mach 4 not listed in Paragraph (d)(4). C</li> <li>(6) Pressure gain combustion-based propulsion systems not listed in Paragraphs (d)(4) and (d)(5). C</li> <li>(7) Rocket, SLV, and missile engines and motors not otherwise listed in Paragraphs (d)(1) through (d)(6) or Part 1 of Table 21. C</li> </ul>	
(e) Reserved.	N/A
(f) Reserved.	N/A
<p>♦ (g) Non-nuclear warheads for rockets, bombs, and missiles (e.g., explosive, kinetic, electromagnetic pulse, thermobaric, shape charge, and fuel air explosive).</p>	G
<p>(h) Systems, subsystems, parts, components, accessories, attachments, or associated equipment:</p> <ul style="list-style-type: none"> <li>(1) Flight control and guidance systems (including guidance sets) specially designed for defense articles listed in Paragraph (a). D</li> <li>(2) Seeker systems specially designed for defense articles listed in Paragraph (a) (e.g., radiofrequency, infrared). D</li> <li>(3) Kinetic kill vehicles and specially designed parts and components. D</li> <li>(4) Missile or rocket thrust vector control systems. D</li> <li>(5) MANPADS grip stocks and specially designed parts and components. D</li> <li>(6) Rocket or missile nozzles and nozzle throats, and specially designed parts and components. D</li> </ul>	

**Table 6. Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets,  
Torpedoes, Bombs, and Mines, Continued**

Description of items for DEMIL coding	DEMIL Code
(7) Rocket or missile nose tips, nose fairings, or aerospikes, and specially designed parts and components.	D
(8) Re-entry vehicle or warhead heat shields.	D
(9) Missile and rocket safing, arming, fuzing, and firing components (to include target detection and proximity sensing devices) and specially designed parts.	D
(10) Self-destruct systems specially designed for defense articles listed in Paragraph (a).	D
(11) Separation mechanisms, staging mechanisms, and interstages useable for defense articles listed in Paragraph (a), and specially designed parts and components.	D
(12) Post-boost vehicles.	D
(13) Engine or motor mounts specially designed for defense articles listed in Paragraphs (a) and (b).	D
(14) Combustion chambers specially designed for defense articles listed in Paragraphs (a) and (d) and specially designed parts and components.	D
(15) Injectors specially designed for defense articles described in this table.	D
(16) Solid rocket motor or liquid engine igniters.	G
(17) Re-entry vehicles and specially designed parts and components not elsewhere specified in this table.	D
(18) Specially designed parts and components for articles described in Paragraph (g) not elsewhere specified in this table.	D
(19) Penetration aids and specially designed parts and components (e.g., physical or electronic countermeasure suites, re-entry vehicle replicas or decoys, or submunitions).	D
(20) Rocket motor cases and specially designed parts and components (e.g., flanges, flange seals, end domes).	D
(21) Solid rocket motor liners and rocket motor insulation; and rocket motor insulation usable in systems in Paragraphs (a)(1) and (a)(2).	D
(22) Radomes, sensor windows, and antenna windows specially designed for articles listed in Paragraph (a).	D
(23) Rocket or missile payload fairings.	D
(24) Rocket or missile launch canisters.	D

**Table 6. Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines, Continued**

Description of items for DEMIL coding	DEMIL Code
(25) Fuzes specially designed for articles listed in Paragraph (a) (e.g., proximity, contact, electronic, dispenser proximity, airburst, variable time delay, or multioption).	G
(26) Rocket or missile liquid propellant tanks.	G
(27) Rocket or missile altimeters specially designed for use in defense articles listed in Paragraph (a)(1).	D
(28) Pneumatic, hydraulic, mechanical, electro-optical, or electromechanical flight control systems (including fly-by-wire systems) and attitude control equipment specially designed for use in the rockets or missiles listed in Paragraph (a)(1).	D
(29) Umbilical and interstage electrical connectors specially designed for use in the rockets or missiles listed in Paragraph (a)(1) or (a)(2).	D
◆ (30) Any part, component, accessory, attachment, equipment, or system that: <ul style="list-style-type: none"> <li data-bbox="344 979 1290 1030">a. Is classified.</li> <li data-bbox="344 1030 1290 1081">b. Contains classified software.</li> <li data-bbox="344 1081 1290 1119">c. Is unclassified but being developed using classified information.</li> </ul>	P P D
(i) Decals, labels and technical manuals containing technical data directly related to the items listed in this table described as either: <ul style="list-style-type: none"> <li data-bbox="295 1220 1290 1250">(1) Classified or</li> <li data-bbox="295 1250 1290 1300">(2) Unclassified.</li> </ul>	P D
<b>Part 2. Military items described in the CCL</b>	
ECCN 0A604	Commodities related to military explosive devices and charges
(a) Demolition blocks, and detonators designed, modified, or adapted.	G
(b) Military explosive excavating devices.	G
(c) Smoke hand grenades and stun hand grenades (e.g., flashbangs) not described in ECCN 1A984.	G
(d) through (w) Reserved.	N/A
(x) Specially designed parts, components, accessories, and attachments that are for an ECCN 0A604 item listed in Paragraph (a) of Part 2 or a defense article in Part 1.	Q

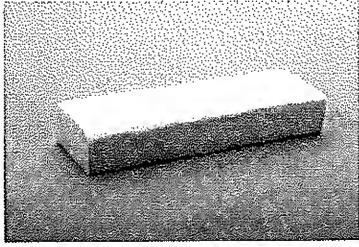
**Table 6. Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets,  
Torpedoes, Bombs, and Mines, Continued**

Description of items for DEMIL coding		DEMIL Code
ECCN 9A604	Commodities related to launch vehicles, missiles, and rockets	
(a) Thermal batteries specially designed for systems described under Part 1 capable of a range equal to or greater than 300 km.		F
(b) Thermal batteries, except for thermal batteries described by Paragraph (a) of this ECCN, that are specially designed for systems described under Part 1.		F
(c) Components specially designed for ramjet, scramjet, pulse jet, or combined cycle engines described under Part 1, including devices to regulate combustion in such commodities.		Q
(d) Components specially designed for hybrid rocket motors described in Part 1 usable in rockets, missiles, or unmanned aerial vehicles (UAV) capable of a range equal to or greater than 300 km.		Q
(e) Components specially designed for pressure gain combustion-based propulsion systems described in Part 1.		Q
(f) Composite structures, laminates, and manufactures thereof specially designed for the following items described in Part 1:		
(1) Systems capable of a range equal to or greater than 300 km.		Q
(2) Individual rocket stages usable in ECCN 9A604, Paragraph (f)(1).		Q
(3) Solid propellant rocket motors or hybrid rocket motors having a total impulse capacity equal to or greater than $8.41 \times 10^5$ N•s. or		Q
(4) Liquid propellant rocket engines integrated, designed, or modified to be integrated, into a liquid propellant propulsion system which has a total impulse capacity equal to or greater than $8.41 \times 10^5$ N•s.		Q
(5) Thrust vector control systems usable in rockets, SLVs, and missiles capable of delivering at least a 500 kg payload to a range of at least 300 km.		Q
(6) Re-entry vehicles or warhead heat shields usable in rockets, SLVs, and missiles capable of delivering at least a 500 kg payload to a range of at least 300 km.		Q
(7) Safing, arming, fuzing, and firing components usable in rockets, SLVs, and missiles capable of delivering at least a 500 kg payload to a range of at least 300 km.		Q
(g) through (w) Reserved.		N/A
(x) Specially designed parts, components, accessories, and attachments for an item listed in this table.		Q

**Table 6. Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets,  
Torpedoes, Bombs, and Mines, Continued**

Description of items for DEMIL coding		DEMIL Code
<b>ECCN 0B604</b>		<b>Test, inspection, and production equipment and related commodities specially designed for the development, production, repair, overhaul, or refurbishing of commodities in ECCN 0A604 or related defense articles in USML Category IV</b>
(a)	Test, inspection, and other production equipment that are specially designed for the development, production, repair, overhaul, or refurbishing of commodities listed in Part 2 or for bombs, torpedoes, depth charges, mines, and hand grenades, and parts, components, accessories, and attachments listed in Part 1.	Q
(b) through (w)	Reserved.	N/A
(x)	Specially designed parts, components, accessories, and attachments that are for an item listed for ECCN 0B604 in Paragraph (a), Part 2.	Q
<b>ECCN 9B604</b>		<b>Test, inspection, and production equipment and related commodities specially designed for the development, production, repair, overhaul, or refurbishing of commodities in ECCN 9A604 or related defense articles in USML Category IV</b>
(a)	Production facilities specially designed for items that are described in Paragraphs (a)(1) or (a)(2) of Part 1 .	Q
(b)	Test, calibration, and alignment equipment specially designed for items that are described in Paragraph (h)(28) of Part 1.	Q
(c)	Test, inspection, and other production equipment that is specially designed for the development, production, repair, overhaul, or refurbishing of commodities described in ECCN 9A604, Part 2 , or defense articles described under Part 1, and not specified in ECCN 0B604 in Paragraph (a) or in ECCN 9B604 Paragraphs (a), (b), or (d) of Part 2.	Q
(d)	Specially designed production facilities or production equipment for systems, sub-systems, and components described in Paragraphs (d)(1), (d)(7), (h)(1), (h)(4), (h)(6), (h)(7), (h)(8), (h)(9), (h)(11), (h)(20), (h)(21), (h)(26), or (h)(28) in Part 1.	Q
(e) through (w)	Reserved.	N/A
(x)	Parts, components, accessories, and attachments that are specially designed for an item subject to ECCN 9B604 in Paragraph (a) or (b) of Part 2.	Q

**Table 7. Explosives and Energetic Materials, Propellants, Incendiary Agents, and their Constituents**

		
<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
<b>Part 1. Explosives and Energetic Materials, Propellants, Incendiary Agents described in USML Category V</b>		
◆ (a) Explosives and mixtures (see Subpart 121.1 of Title 22, CFR for a complete list).		G
◆ (b) Propellants (see Subpart 121.1 of Title 22, CFR for a complete list).		G
(c) Pyrotechnics, fuels, and related substances, and mixtures (see Subpart 121.1 of Title 22, CFR for a complete list).		G
(d) Oxidizers (see Subpart 121.1 of Title 22, CFR for a complete list).		G
◆ (e) Binders and mixtures (see Subpart 121.1 of Title 22, CFR for a complete list).		G
(f) Additives (see Subpart 121.1 of Title 22, CFR for a complete list).		G
(g) Precursors (see Subpart 121.1 of Title 22, CFR for a complete list).		G
◆ (h) Any explosive, propellant, pyrotechnic, fuel, oxidizer, binder, additive, or precursor that:		
(1) Is classified.		G
(2) Is unclassified but being developed using classified information.		G
(i) Developmental explosives, propellants, pyrotechnics, fuels, oxidizers, binders, additives, or precursors funded by DoD via contract or other funding authorization.		G
(j) Decals, labels, and technical manuals containing technical data directly related to the items listed described as either:		
(1) Classified or		P
(2) Unclassified.		D
(k) The interpretations at the end explain and amplify the terms used in this table.		N/A
(l) through (w) Reserved.		N/A

**Table 7. Explosives and Energetic Materials, Propellants, Incendiary Agents and Their Constituents, Continued**

<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
<b>Part 2. Military items described in the CCL</b>		
<b>ECCN 1B608</b>	Test, inspection, and production equipment and related commodities specially designed for the development, production, repair, overhaul, or refurbishing of commodities listed in ECCN 1C608 or USML Category V.	
(a) Equipment specially designed for the development, production, repair, overhaul, or refurbishing of items described in ECCN 1C608 or listed in Part 1 and not elsewhere specified on the USML.		Q
(b) Complete installations specially designed for the development, production, repair, overhaul, or refurbishing of items described in ECCN 1C608 or listed in Part 1 and not elsewhere specified on the USML.		Q
(c) Environmental test facilities specially designed for the certification, qualification, or testing of items described in ECCN 1C608 or listed in Part 1.		Q
(d) through (w) Reserved.		N/A
(x) Parts, components, accessories, and attachments that are specially designed for an item described in ECCN 1B608 or a defense article listed in Part 1 and not elsewhere specified on the USML.		Q
<b>ECCN 1C608</b>	<b>Energetic materials and related commodities</b>	
(a) Single base, double base, and triple base propellants having nitrocellulose with nitrogen content greater than 12.6 percent in the form of either:		
(1) Sheetstock or carpet rolls; or		G
(2) Grains with diameter greater than 0.10 inches.		G
(b) Shock tubes containing greater than 0.064 kg per meter (300 grains per foot), but not more than 0.1 kg per meter (470 grains per foot) of controlled materials.		G
(c) Cartridge power devices containing greater than 0.70 kg, but not more than 1.0 kg of controlled materials.		G
(d) Detonators (electric or nonelectric) and specially designed assemblies containing greater than 0.01 kg, but not more than 0.1 kg of controlled materials.		G
(e) Igniters not described in Part 1 USML Categories III or IV that contain greater than 0.01 kg, but not more than 0.1 kg of controlled materials.		G
(f) Oil well cartridges containing greater than 0.015 kg, but not more than 0.1 kg of controlled materials.		G

**Table 7. Explosives and Energetic Materials, Propellants, Incendiary Agents and Their Constituents, Continued**

Description of items for DEMIL coding	DEMIL Code
(g) Commercial cast or pressed boosters containing greater than 1.0 kg, but not more than 5.0 kg of controlled materials.	G
(h) Commercial prefabricated slurries and emulsions containing greater than 10 kg and less than or equal to 35 percent by weight of USML controlled materials.	G
(i) Reserved.	N/A
(j) Pyrotechnic devices specially designed for commercial purposes (e.g., theatrical stages, motion picture special effects, and fireworks displays), and containing greater than 3.0 kg, but not more than 5.0 kg of controlled materials.	G
(k) Other commercial explosive devices or charges specially designed for commercial applications, not described in Paragraphs (c) through (g) of this ECCN, containing greater than 1.0 kg, but not more than 5.0 kg of controlled materials.	G
(l) Propyleneimine.	G
(m) Any oxidizer or mixture thereof that is a compound composed of fluorine and one or more of the following: other halogens, oxygen, or nitrogen.	G
(n) Any explosives, propellants, oxidizers, pyrotechnics, fuels, binders, or additives that are specially designed for military application and not listed or otherwise described in Part 1 or elsewhere on the USML.	G

#### **INTERPRETATIONS:**

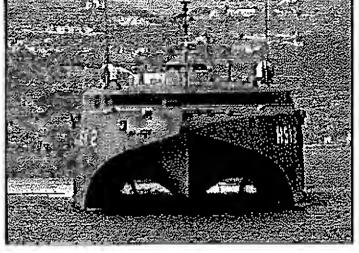
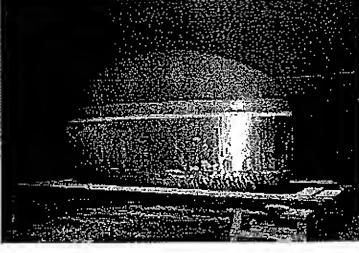
The following interpretations explain and amplify the terms used in this table.

- (a) Part 1.
  - (1) This table provides DEMIL codes for USML Category V explosives, energetic materials, propellants, and pyrotechnics and specially formulated fuels for aircraft, missile, and naval applications. Explosives are solid, liquid, or gaseous substances or mixtures of substances, which, in their primary, booster, or main charges in warheads, demolition, or other military applications, are required to detonate.
  - (2) The resulting product of the combination or conversion of any substance described in this table into an item not controlled will no longer be described in this table provided the controlled item cannot easily be recovered through dissolution, melting, sieving, etc. As an example, beryllium converted to a near net shape using hot isostatic processes will result in an uncontrolled part. A cured thermoset containing beryllium powder is not controlled unless meeting an explosive or propellant control. The mixture of beryllium powder in a cured thermoset shape is not described in this table. Use this table to determine the DEMIL code for the mixture of controlled beryllium powder mixed with a typical propellant binder. The addition of dry silica powder to dry beryllium powder will remain controlled.

**Table 7. Explosives and Energetic Materials, Propellants, Incendiary Agents and Their Constituents, Continued**

- (3) Paragraph (c)(4)(ii)(A) of Subpart 121.1 of Title 22, CFR does not apply to boron and boron carbide enriched with boron-10 (20 percent or more of total boron-10 content).
  - (4) Theoretical specific impulse is calculated using standard conditions (1000 psi chamber pressure expanded to 14.7 psi) and measured in units of pound-force (lbf) seconds per pound-mass (lbm) or simplified to seconds (s). Calculations will be based on shifting equilibrium.
  - (5) Particle size is the mean particle diameter on a weight basis. Best industrial practices will be used in determining particle size and the controls may not be undermined by addition of larger or smaller sized material to shift the mean diameter.
- (b) Part 2. For items listed in Part 2, the term controlled materials means controlled energetic materials listed in Part 1 or for ECCN 1C608 in Part 2.

**Table 8. Surface Vessels of War and Special Naval Equipment**

  		<b>DEMIL Code</b>
<b>Description of items for DEMIL coding</b>		
<b>Part 1. Surface Vessels of War and Special Naval Equipment described in USML Category VI</b>		
♦ (a) Warships and other combatant vessels (i.e., battleships, aircraft carriers, destroyers, frigates, cruisers, corvettes, littoral combat ships, mine sweepers, mine hunters, mine countermeasure ships, dock landing ships, amphibious assault ships), Coast Guard cutters (with or equivalent to those with U.S. designations as "W" for Coast Guard vessels high endurance cutters (WHEC), medium endurance cutters (WMSC), maritime security cutter, large (WMSL), or patrol boats (WPB) for the purpose of this table), or foreign-origin vessels specially designed to provide functions equivalent to the vessels listed here.		C
(b) Other vessels not described in Paragraph (a):		
(1) High-speed air cushion vessels for transporting cargo and personnel, ship-to-shore and across a beach, with a payload over 25 tons.		C
(2) Surface vessels integrated with nuclear propulsion plants or specially designed to support naval nuclear propulsion plants.		C
(3) Vessels armed or specially designed to be used as a platform to deliver munitions or otherwise destroy or incapacitate targets (e.g., firing lasers, launching torpedoes, rockets, missiles, or firing munitions greater than .50 caliber).		C
(4) Vessels incorporating any mission systems described in Tables 3 to 23.		C
(c) Developmental vessels and specially designed parts, components, accessories, and attachments, funded by the DoD via contract or other funding authorization.		C
(d) Reserved.		N/A
♦ (e) Naval nuclear propulsion plants and prototypes and special facilities for their construction, support, and maintenance.		C
(f) Vessel and naval equipment components, parts, accessories, attachments, associated equipment, and systems:		
(1) Hulls or superstructures, including support structures that:		D

**Table 8. Surface Vessels of War and Special Naval Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
<ul style="list-style-type: none"> <li>a. Are specially designed for any vessels described in Paragraph (a) of Table 8.</li> <li>b. Have armor, active protection systems, or developmental armor systems.</li> <li>c. Are specially designed to survive 12.5 percent or greater damage across the length as measured between perpendiculars.</li> </ul>	
<ul style="list-style-type: none"> <li>(2) Systems that manage, store, create, distribute, conserve, and transfer energy, and specially designed parts and components that have:           <ul style="list-style-type: none"> <li>a. Storage exceeding 30 megajoules;</li> <li>b. A discharge rate less than 3 seconds; and</li> <li>c. A cycle time under 45 seconds.</li> </ul> </li> </ul>	D
<ul style="list-style-type: none"> <li>(3) Shipborne auxiliary systems for chemical, biological, radiological, and nuclear compartmentalization, over-pressurization and filtration systems, and specially designed parts and components.</li> </ul>	F
<ul style="list-style-type: none"> <li>♦ (4) Control and monitoring systems for autonomous unmanned vessels capable of on-board, autonomous perception and decision-making necessary for the vessel to navigate while avoiding fixed and moving hazards, and obeying rules-of-the-road without human intervention.</li> </ul>	D
<ul style="list-style-type: none"> <li>♦ (5) Any machinery, device, component, or equipment, including production, testing, and inspection equipment, and tooling, specially designed, or modified for plants or facilities described in Paragraph (e).</li> </ul>	D
<ul style="list-style-type: none"> <li>(6) Parts, components, accessories, attachments, and equipment specially designed for integration of articles described in Part 1 of Tables 4, 6, and 20 or catapults for launching aircraft or arresting gear for recovering aircraft.</li> </ul>	D
<ul style="list-style-type: none"> <li>(7) Shipborne active protection systems (i.e., defensive systems that actively detect and track incoming threats and launch a ballistic, explosive, energy, or electromagnetic countermeasure(s) to neutralize the threat before contact with a vessel) and specially designed parts and components.</li> </ul>	D
<ul style="list-style-type: none"> <li>(8) Minesweeping and mine hunting equipment (including mine countermeasures equipment deployed by aircraft) and specially designed parts and components.</li> </ul>	D
<ul style="list-style-type: none"> <li>♦ (9) Any component, part, accessory, attachment, equipment, or system that:           <ul style="list-style-type: none"> <li>a. Is classified.</li> <li>b. Contains classified software.</li> <li>c. Is unclassified but being developed using classified information.</li> </ul> </li> </ul>	P P D
(g) Decals, labels, and technical manuals containing technical data directly related to the items listed in this table described as either:	

**Table 8. Surface Vessels of War and Special Naval Equipment, Continued**

<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
(1) Classified or		P
(2) Unclassified.		D
(h) through (w) Reserved.		N/A
<b>Part 2. Military items described in the CCL</b>		
<b>ECCN 8A609</b>	<b>Surface vessels of war and related commodities.</b>	
(a) Surface vessels of war specially designed for a military use and not listed in Part 1:		
(1) Underway replenishment ships.		C
(2) Surface vessel and submarine tender and repair ships, ships, except vessels that are specially designed to support naval nuclear propulsion plants.		C
(3) Non-submersible submarine rescue ships.		C
(4) Other auxiliaries (e.g., auxiliary deep submergence support ship, auxiliary miscellaneous command ship, auxiliary missile range instrumentation ship, auxiliary organic research ship, auxiliary ocean surveillance ship, auxiliary hospital ship , auxiliary transport , auxiliary repair ship, small auxiliary aviation logistic support ship , auxiliary guided missile ship, and auxiliary aircraft landing training ship).		C
(5) Amphibious warfare craft except those that are armed.		C
(6) Unarmored and unarmed coastal, patrol, roadstead, and Coast Guard and other patrol craft with mounts or hard points for firearms of .50 caliber or less.		C
(b) Non-magnetic diesel engines with a power output of 50 horsepower or more and either of the following:		
(1) Non-magnetic content exceeding 25 percent of total weight; or		Q
(2) Non-magnetic parts other than crankcase, block, head, pistons, covers, end plates, valve facings, gaskets, and fuel, lubrication, and other supply lines.		Q
(c) through (w) Reserved.		N/A
(x) Specially designed parts, components, accessories, and attachments that are for an item listed in ECCN 8A609 in Part 2 or a defense article in Part 1 and not listed in ECCN 8A609 in Paragraph (y), Part 2.		Q
(y) Specific parts, components, accessories, and attachments specially designed for an item described in Part 2 of this table		
(1) Public address systems.		A

**Table 8. Surface Vessels of War and Special Naval Equipment, Continued**

<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
(2) Filters and filter assemblies, hoses, lines, fittings, couplings, and brackets for pneumatic, hydraulic, oil, and fuel systems.		A
(3) Galleys.		A
(4) Lavatories.		A
(5) Magnetic compass, magnetic azimuth detector.		A
(6) Medical facilities.		A
(7) Potable water tanks, filters, valves, hoses, lines, fittings, couplings, and brackets.		A
(8) Panel knobs, indicators, switches, buttons, and dials whether unfiltered or filtered for use with night vision imaging systems.		A
(9) Emergency lighting.		A
(10) Gauges and indicators.		A
(11) Audio selector panels.		A
<b>ECCN 8B609</b>	<b>Test, inspection, and production equipment and related commodities specially designed for the development, production, repair, overhaul, or refurbishing of commodities listed in ECCN 8A609 or USML Category VI.</b>	
(a) Test, inspection, and production equipment specially designed for the development, production, repair, overhaul, or refurbishing of commodities listed in ECCN 8A609 in Part 2 or in Part 1, and parts, components, accessories, and attachments specially designed.		C
(b) Reserved.		N/A
<b>ECCN 8C609</b>	<b>Materials specially designed for the development or production of commodities described in 8A609 not elsewhere specified in the USML.</b>	
(a) Materials not listed in Part 1 specially designed for commodities listed in ECCN 8A609 in Part 2.		Q
(b) Reserved.		N/A
<b>INTERPRETATIONS:</b>		
(a) Surface vessels of war are those manned or unmanned that:		
(1) Are warships and other combatant vessels (battleships, aircraft carriers, destroyers, frigates, cruisers, corvettes, littoral combat ships, mine sweepers, mine hunters, mine		

**Table 8. Surface Vessels of War and Special Naval Equipment, Continued**

countermeasures ships, dock landing ships, amphibious assault ships), or Coast Guard cutters (with or equivalent to designations WHEC, WMEC, WMSL, or WPB).

- (2) Are foreign-origin vessels specially designed to provide functions equivalent to those of the vessels listed in Paragraph (a)(1) of these interpretations.
  - (3) Are high-speed air cushion vessels for transporting cargo and personnel, ship-to-shore and across a beach, with a payload over 25 tons.
  - (4) Are surface vessels integrated with nuclear propulsion systems or specially designed to support naval nuclear propulsion plants.
  - (5) Are armed or are specifically designed to be used as a platform to deliver munitions or otherwise destroy or incapacitate targets (e.g., firing lasers, launching torpedoes, rockets, or missiles, or firing munitions greater than .50 caliber).
  - (6) Incorporate any mission systems described in Tables 3 to 23. This refers to specific functions such as military communication, electronic warfare, target designation, surveillance, target detection, or sensor capabilities.
- (b) Vessels specially designed for military use that are not described in Paragraph (a) of this table are subject to the EAR in accordance with Parts 730-774 of Title 15, CFR under ECCN 8A609, including any demilitarized vessels, regardless of origin or designation, manufactured before 1950 and unmodified since 1949. Modifications made to incorporate safety features required by law, are cosmetic (e.g., different paint), or that add parts or components otherwise available before 1950 are considered unmodified for the purposes of this paragraph.

**Table 9. Ground Vehicles**

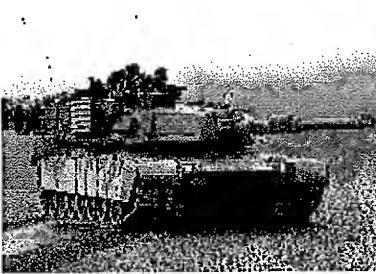
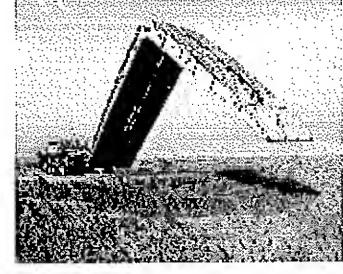
			
<b>Description of items for DEMIL coding</b>			<b>DEMIL Code</b>
<b>Part 1. Ground Vehicles described in USML Category VII</b>			
♦ (a) Armored combat ground vehicles:			
(1) Tanks.			D
(2) Infantry fighting vehicles.			D
♦ (b) Ground vehicles (not listed in Paragraph (a)) and trailers that are armed or are specially designed to serve as a firing or launch platform.			C
(c) Ground vehicles and trailers equipped with any mission systems described in Part 1 of Tables 3 to 23.			C
(d) Reserved.			N/A
♦ (e) Armored support ground vehicles capable of off-road or amphibious use specially designed to transport or deploy personnel or materiel, or to move with other vehicles over land in close support of combat vehicles or troops (e.g., personnel carriers, resupply vehicles, combat engineer vehicles, recovery vehicles, reconnaissance vehicles, bridge launching vehicles, ambulances, and command and control vehicles).			
(1) Armor integral to structure.			D
(2) Add-on armor (i.e., bolted, welded, or otherwise attached).			C
(f) Reserved.			N/A
(g) Ground vehicle parts, components, accessories, attachments, and associated equipment.			
(1) Armored hulls, armored turrets, and turret rings.			D
(2) Active protection systems (i.e., defensive systems that actively detect and track incoming threats and launch a ballistic, explosive, energy, or electromagnetic countermeasure(s) to neutralize the threat before contact with a vehicle) and specially designed parts and components.			D
(3) Composite armor parts and components specially designed for the vehicles in this table.			D

Table 9. Ground Vehicles, Continued

Description of items for DEMIL coding	DEMIL Code
(4) Non-explosive spaced armor components and parts, including slat armor parts and components and parts specially designed for the vehicles in this table.	D
(5) Reactive armor parts and explosive parts and components.	G
(6) Electromagnetic armor parts and components, including pulsed power specially designed parts and components.	D
(7) Built in test equipment to evaluate the condition of weapons or other mission systems for vehicles described in this table, excluding equipment that provides diagnostics solely for a subsystem or component for the basic operation of the vehicle.	D
(8) Gun mount, stabilization, turret drive, and automatic elevating systems, and specially designed parts and components.	D
(9) Self-launching bridge components rated for 60 tons or above for deployment by vehicles listed in this table.	D
(10) Suspension components. <ul style="list-style-type: none"> <li>a. Rotary shock absorbers specially designed for the vehicles weighing more than 30 tons in this table.</li> <li>b. Torsion bars specially designed for the vehicles weighing more than 50 tons in this table.</li> </ul>	D D
(11) Kits specially designed to convert a vehicle in this table into either an unmanned or a driver-optimal vehicle. For a kit to be described by this paragraph, it must, at a minimum, include equipment for: <ul style="list-style-type: none"> <li>a. Remote or autonomous steering.</li> <li>b. Acceleration and braking.</li> <li>c. A control system.</li> </ul>	D
(12) Fire control computers, mission computers, vehicle management computers, integrated core processors, stores management systems, armaments control processors, vehicle-weapon interface units, and computers.	D
(13) Test or calibration equipment for the mission systems of the vehicles described in this table, except those listed elsewhere; or	D
♦ (14) Any part, component, accessory, attachment, equipment, or system that: <ul style="list-style-type: none"> <li>a. Is classified.</li> <li>b. Contains classified software.</li> <li>c. Is unclassified but is being developed using classified information.</li> </ul>	P P D

**Table 9. Ground Vehicles, Continued**

Description of items for DEMIL coding	DEMIL Code
(h) Decals, labels, and technical manuals containing technical data directly related to the items listed in this table described as either:  (1) Classified or (2) Unclassified.	P D
(i) through (w) Reserved.	N/A
<b>Part 2. Military items described in the CCL</b>	
ECCN 0A606	Ground vehicles and related commodities.
(a) Ground vehicles, whether manned or unmanned, specially designed for a military use and not listed in Part 1 of Table 9.  (1) Reserved. (2) Reserved. (3) Unarmored military recovery and other support vehicles. (4) Unarmored, unarmed vehicles with mounts or hard points for firearms of .50 caliber or less. (5) Trailers specially designed for use with other ground vehicles listed in Part 1 or Paragraph (a) of Part 2, and not separately listed in Part 1.	N/A N/A Q C Q
(b) Other ground vehicles, parts, and components:  (1) Unarmed vehicles that are derived from civilian vehicles and that have all of the following:  a. Manufactured or fitted with materials or components other than reactive or electromagnetic armor to provide ballistic protection to National Institute of Justice (NIJ) Standard 0108.01 type III or higher; b. A transmission to provide drive to both front and rear wheels simultaneously, including those vehicles having additional wheels for load bearing purposes whether driven or not; c. Gross vehicle weight rating greater than 4,500 kg; and d. Designed or modified for off-road use.  (2) Parts and components having all of the following:  a. Specially designed for vehicles specified in Paragraph (b)(1) of Part 2. b. Providing ballistic protection to NIJ Standard 0108.01, type III or higher.	C D
(c) Air-cooled diesel engines and engine blocks for armored vehicles that weigh more than 40 tons.	Q

Table 9. Ground Vehicles, Continued

Description of items for DEMIL coding	DEMIL Code
(d) Fully automatic continuously variable transmissions for tracked combat vehicles.	D
(e) Deep water fording kits specially designed for ground vehicles described in Part 1 or for ECCN 0A606 in Paragraph (a), Part 2.	Q
(f) Self-launching bridge components not listed in Paragraph (g), Part 1, specially designed for deployment by ground vehicles listed in Part 1 or in ECCN 0A606, Part 2.	Q
(g) through (w) Reserved.	N/A
(x) Specially designed parts, components, accessories, and attachments that are for a defense article in Part 1 or for an item listed in ECCN 0A606 (other than Paragraph (b) or (y)) of Part 2.	Q
(y) Specific parts, components, accessories, and attachments specially designed for an item listed in this ECCN (other than Paragraph (b)) or a defense article in Part 1, and parts components, accessories, and attachments specially designed:	
(1) Brake discs, rotors, drums, calipers, cylinders, pads, shoes, lines, hoses, vacuum boosters, and parts.	A
(2) Alternators and generators.	A
(3) Axles.	A
(4) Batteries.	A
(5) Bearings (e.g., ball, roller, wheel).	A
(6) Cables, cable assemblies, and connectors.	A
(7) Cooling system hoses.	A
(8) Hydraulic, fuel, oil, and air filters, other than those described in ECCN 1A004.	A
(9) Gaskets and o-rings.	A
(10) Hydraulic system hoses, fittings, couplings, adapters, and valves.	A
(11) Latches and hinges.	A
(12) Lighting systems, fuses, and components.	A
(13) Pneumatic hoses, fittings, adapters, couplings, and valves.	A
(14) Seats, seat assemblies, seat supports, and harnesses.	A
(15) Tires, except run flat.	A
(16) Windows, except those for armored vehicles.	A

**Table 9. Ground Vehicles, Continued**

<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
<b>ECCN 0B606</b>	<b>Test, inspection, and production equipment and related commodities, not listed on the USML, specially designed for the development or production, repair, overhaul, or refurbishing of commodities listed in ECCN 0A606 or USML Category VII.</b>	
(a) Test, inspection, and production equipment specially designed for the development, production, repair, overhaul, or refurbishing of commodities listed in this table except ECCN 0A606 Paragraphs (b) and (y), and parts, components, accessories, and attachments specially designed including:	(1) Armor plate drilling machines, other than radial drilling machines. (2) Armor plate planning machines. (3) Armor plate quenching presses. (4) Tank turret bearing grinding machines.	Q
(b) Environmental test facilities specially designed for the certification, qualification, or testing of commodities listed in ECCN 0A606 in Part 2 (except for Paragraph (b)), or in Part 1, and equipment specially designed.		Q
<b>ECCN 0C606</b>	<b>Materials specially designed for commodities described by 0A606 not elsewhere specified the USML.</b>	
(a) Materials specially designed for commodities listed in ECCN 0A606 or Part 1, not elsewhere specified in the USML or the CCL.		Q
<b>INTERPRETATIONS:</b>		
(a) Armored ground vehicles, for purposes of Paragraph (a):		
(1) Are ground vehicles that have integrated, fully armored hulls or cabs, or		
(2) Are ground vehicles on which add-on armor has been installed to provide ballistic protection to NIJ Standard 0108.01 type III or higher. Armored vehicles do not include those that are merely capable of being equipped with add-on armor.		
(b) Ground vehicles include any vehicle meeting the definitions or control parameters regardless of the surface (e.g., highway, off-road, rail) upon which the vehicle is designed to operate.		
(c) Ground vehicles specially designed for military applications that are not described above are subject to the EAR in accordance with Parts 730-774 of Title 15, CFR under ECCN 0A606, including any unarmed ground vehicles, regardless of origin or designation, manufactured		

**Table 9. Ground Vehicles, Continued**

before 1956 and unmodified since 1955. Modifications made to incorporate safety features required by law, are cosmetic (e.g., different paint, repositioning of bolt holes), or that add parts or components otherwise available before 1956 are considered unmodified for the purposes of this paragraph. ECCN 0A606 also includes unarmed vehicles derived from otherwise EAR99 civilian vehicles that have been modified or otherwise fitted with materials to provide ballistic protection in accordance with Parts 730-774 of Title 15, CFR, including protection to NIJ Standard 0108.01 type III or higher and that do not have reactive or electromagnetic armor.

- (d) NIJ Standard 0108.01 identifies types from I through IV in the following order of increasing protection.

Type II-A (Lower Velocity 357 Magnum; 9 mm).

Type II (Higher Velocity 357 Magnum; 9 mm).

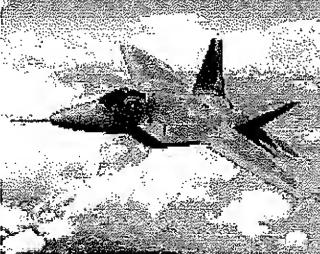
Type III-A (44 Magnum; Submachine Gun 9 mm).

Type III (High-Powered Rifle).

Type IV (Armor-Piercing Rifle).

Reactive armor employs explosives, propellants, or other materials between plates for the purpose of enhancing plate motion during a ballistic event or otherwise defeating the penetrator.

**Table 10. Aircraft and Related Articles**

  		<b>DEMIL Code</b>	
<b>Description of items for DEMIL coding</b>			
<b>Part 1. Aircraft and Related Articles described in USML Category VIII</b>			
(a) Aircraft, whether manned, unmanned, remotely piloted, or optionally piloted:			
♦ (1) Bombers.		C	
♦ (2) Fighters, fighter bombers, and fixed wing attack aircraft.		C	
♦ (3) Turbofan- or turbojet-powered trainers used to train pilots for fighter, attack, or bomber aircraft.		C	
♦ (4) Attack helicopters.		C	
♦ (5) UAVs incorporating or specially designed to incorporate a defense article.		C	
♦ (6) Reserved.		N/A	
♦ (7) Intelligence, surveillance, and reconnaissance aircraft incorporating or specially designed to incorporate a defense article.		C	
♦ (8) Electronic warfare aircraft, airborne warning and control aircraft, or command, control, and communications aircraft incorporating or specially designed to incorporate a defense article.		C	
(9) Air refueling aircraft.		C	
(10) Target drones.		C	
(11) Reserved.		N/A	
(12) Aircraft capable of being refueled in flight including hover-in-flight refueling.		C	
(13) Reserved.		N/A	
(14) Aircraft with a roll-on and roll-off ramp, capable of airlifting payloads over 35,000 pounds to ranges over 2,000 nautical miles (nmi) without being refueled in-flight, and landing onto short or unimproved airfields, other than L-100 aircraft manufactured before 2013.		C	
♦ (15) Aircraft not listed in Paragraphs (a)(1) through (a)(14).			
a. U.S.-origin aircraft that bear an original military designation of A, B, E, F, K, M, P, R, or S.		C	

**Table 10. Aircraft and Related Articles, Continued**

Description of items for DEMIL coding	DEMIL Code
b. Foreign-origin aircraft specially designed to provide functions equivalent to those of the aircraft listed in Paragraph (a)(15)(a).	C
(16) Aircraft that are armed or are specially designed to be used as a platform to deliver munitions or otherwise destroy targets (e.g., firing lasers, launching rockets, firing missiles, dropping bombs, or strafing).	C
(b) Reserved.	N/A
(c) Reserved.	N/A
(d) Launching and recovery equipment specially designed to allow an aircraft described in Paragraph (a) to take off or land on a vessel described in Table 8 Part 1 Paragraphs (a) through (c).	D
(e) Reserved.	N/A
(f) Developmental aircraft and specially designed parts, components, accessories, and attachments funded by the DoD.	C
(g) Reserved.	N/A
(h) Aircraft parts, components, accessories, attachments, associated equipment, and systems. <ul style="list-style-type: none"> <li data-bbox="300 1072 1302 1199">(1) Parts, components, accessories, attachments, and equipment specially designed for aircraft described in Paragraphs (a)(1) through (a)(8), (a)(13) and (a)(15) unless specifically listed in Paragraphs (h)(2) through (h)(26).</li> <li data-bbox="300 1199 1302 1347">(2) Rotorcraft gearboxes with internal pitch line velocities exceeding 20,000 feet per minute and operating 30 minutes with loss of lubrication without an emergency or auxiliary lubrication system and specially designed parts and components.</li> <li data-bbox="300 1347 1302 1431">(3) Tail boom folding systems, stabilator folding systems, or automatic rotor blade folding systems, and specially designed parts and components.</li> <li data-bbox="300 1431 1302 1480">(4) Wing folding systems and specially designed parts and components.</li> <li data-bbox="300 1480 1302 1564">(5) On-aircraft arresting gear (e.g. tail hooks and drag chutes) and specially designed parts and components.</li> <li data-bbox="300 1564 1302 1670">(6) Bomb racks, missile launchers, missile rails, weapon pylons, pylon-to launcher adapters, UAV launching systems, external stores support systems for ordnance or weapons, and specially designed parts and components</li> <li data-bbox="300 1670 1302 1797">(7) Damage or failure-adaptive flight control systems that do not consist solely of redundant internal circuitry specially designed for aircraft described in this table.</li> <li data-bbox="300 1797 1302 1845">(8) Threat-adaptive autonomous flight control systems.</li> <li data-bbox="300 1845 1302 1930">(9) Non-surface-based flight control systems and effectors (e.g., thrust vectoring from gas ports other than main engine thrust vector).</li> </ul>	D

Table 10. Aircraft and Related Articles, Continued

Description of items for DEMIL coding	DEMIL Code
(10) Radar altimeters with output power management low probability of intercept (LPI) or signal modulation (i.e., frequency hopping, chirping, direct sequence-spectrum spreading) LPI capabilities.	D
(11) Air-to-air refueling systems and hover-in-flight refueling systems and specially designed parts and components.	D
(12) UAV flight control systems and vehicle management systems with swarming capability (i.e., UAVs interact with each other to avoid collisions and stay together, or, if weaponized, coordinate targeting).	D
(13) Reserved.	N/A
(14) Lift fans, clutches, and roll posts for short take-off, vertical landing aircraft and specially designed parts and components for such lift fans and roll posts.	D
(15) Integrated helmets incorporating optical sights or slewing devices, which include the ability to aim, launch, track, or manage munitions (e.g., helmet mounted cueing systems, joint helmet mounted cueing systems, helmet mounted displays, display and sight helmets and specially designed parts, components, accessories, and attachments).	D
(16) Fire control computers, stores management systems, armaments control processors, aircraft-weapon interface units and computers (e.g., anti-radiation guided missile 88 high-speed anti-radiation missile aircraft launcher interface computer).	D
(17) Mission computers, vehicle management computers, and integrated core processers specially designed for aircraft described in this table or in ECCN 9A610 in Part 2.	D
(18) Drive systems and flight control systems specially designed to function after impact of a 7.62 mm or larger projectile.	D
(19) Thrust reversers specially designed to be deployed in flight for aircraft described in this table or in ECCN 9A610 in Part 2.	D
◆ (20) Any part, component, accessory, attachment, equipment, or system that: <ul style="list-style-type: none"> <li>a. Is classified.</li> <li>b. Contains classified software.</li> <li>c. Is unclassified but being developed using classified information.</li> </ul>	P
(21) Reserved.	P
(22) Reserved.	D
(23) Reserved.	N/A
(24) Reserved.	N/A

**Table 10. Aircraft and Related Articles, Continued**

Description of items for DEMIL coding	DEMIL Code
(25) Reserved	N/A
(26) Reserved.	N/A
(27) Variable speed gearboxes capable of varying output speed by 50 percent or greater and providing power to rotors, propellers, propfans, or liftfans; and specially designed parts and components.	D
(28) Electrical power or thermal management systems integrated with an engine listed in Table 21 having any of the following:	D
a. Electrical power generators that provide greater than 300 kilowatts (kW) of electrical power (per generator) with gravimetric power densities exceeding 2kW/pound;	
b. Heat exchangers that exchange 200 kW of heat or greater into the gas turbine engine flow path;	
c. Logic controls that maintain gas turbine engine operability during pneumatic and shaft power extraction of 2kW/pound; or	
d. Direct-cooling thermal electronic package heat exchangers that transfers 20kW of heat or greater at 100W/cm <sup>2</sup> or greater.	
(29) Flight control algorithms or software that aid in landing a fixed-wing aircraft on any vessel controlled in Table 9.	N/A
(30) The following, if specially designed for the B-1B, B-2, F-15SE, F/A-18 E/F, EA-18G, F-22, F-35, and future variants thereof; or the F-117 or U.S. Government technology demonstrators.	
a. Wind tunnel and other scale test models.	D
b. Full scale iron bird ground rigs used to test major aircraft systems.	D
c. Autonomic logistics information system.	D
d. Jigs, locating fixtures, templates, gauges, molds, dies, and caul plates, for production of airframe parts and components.	D
(i) Decals, labels, and technical manuals containing technical data directly related to the items listed in this table described as either:	
(1) Classified or	P
(2) Unclassified.	D
(j) through (w) Reserved.	N/A

**Table 10. Aircraft and Related Articles, Continued**

<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
<b>Part 2. Military items described in the CCL</b>		
<b>ECCN 9A610</b>	<b>Military aircraft and related commodities.</b>	
(a) Military aircraft that are not listed in Part 1 specially designed for a military use. This includes the aircraft to the extent they were specially designed for a military use and are not listed in Part 1: trainer aircraft; cargo aircraft; utility fixed wing aircraft; military helicopters; observation aircraft; military non-expansive balloons and other lighter than air aircraft and unarmed military aircraft, regardless of origin or designation.		C
(b) L100 aircraft manufactured before 2013.		C
(c) to (d) Reserved.		N/A
(e) Mobile aircraft arresting and engagement systems for aircraft in this table.		D
(f) Pressure refueling equipment and other ground equipment specially designed for aircraft listed in this table to facilitate operations in confined areas.		C
(g) Aircrew life support equipment, aircrew safety equipment and other devices for emergency escape from aircraft described by either Part 1 or Part 2.		D
(h) Parachutes, paragliders, complete parachute canopies, harnesses, platforms, electronic release mechanisms specially designed for use with aircraft described by either Paragraph (a), Part 1 or Paragraph (a) of ECCN 9A610 in Part 2 and equipment specially designed for military high altitude parachutists, such as suits, special helmets, breathing systems, and navigation equipment.		D
(i) Controlled opening equipment or automatic piloting systems designed for parachuted loads.		D
(j) Ground effect machines, including surface effect machines and air cushion vehicles, specially designed for use by a military.		C
(k) through (s) Reserved.		N/A
(t) Composite structures, laminates, and manufactures thereof specially designed for UAVs described in Paragraph (a), Part 1 with a range equal to or greater than 300 km.		Q
(u) Apparatus and devices specially designed for the handling, control, activation, and non-ship-based launching of UAVs or drones described by either Paragraph (a), Part 1 or ECCN 9A610, Paragraph (a), Part 2 and capable of a range equal to or greater than 300 km.		D
(v) Radar altimeters designed or modified for use in UAVs or drones described by either Paragraph (a), Part 1 or ECCN 9A610, Paragraph (a), Part 2.		D

**Table 10. Aircraft and Related Articles, Continued**

Description of items for DEMIL coding	DEMIL Code
(w) Pneumatic, hydraulic, mechanical, electro-optical, or electromechanical flight control systems (including fly-by-wire systems and fly-by-light systems) and attitude control equipment designed or modified for UAVs or drones described by either Paragraph (a), Part 1 or ECCN 9A610, Paragraph (a), Part 2.	D
(x) Specially designed parts, components, accessories, and attachments that are for an item listed in this ECCN or in Part 1 and that are not listed in Paragraph (y), Part 2 and not listed Paragraph (h)(1), Part 1.	Q
(y) Specific parts, components, accessories, and attachments specially designed for an item listed in this ECCN or in Part 1, or in Table 21, Part 2, ECCN 9A619.	
(1) Aircraft tires.	A
(2) Analog gauges and indicators.	A
(3) Audio selector panels.	A
(4) Check valves for hydraulic and pneumatic systems.	A
(5) Crew rest equipment.	A
(6) Ejection seat mounted survival aids.	A
(7) Energy dissipating pads for cargo (for pads made from paper or cardboard).	A
(8) Fluid filters and filter assemblies.	A
(9) Galleys.	A
(10) Fluid hoses, straight and unbent lines, fittings, couplings, clamps, and brackets.	A
(11) Lavatories.	A
(12) Life rafts.	A
(13) Magnetic compass, magnetic azimuth detector.	A
(14) Medical litter provisions.	A
(15) Cockpit or cabin.	A
(16) Passenger seats including palletized seats.	A
(17) Potable water storage systems.	A
(18) Public address systems.	A
(19) Steel brake wear pads (does not include sintered mix or carbon/carbon materials).	A
(20) Underwater locator beacons.	A
(21) Urine collection bags, pads, cups, pumps.	A
(22) Windshield washer and wiper systems.	A

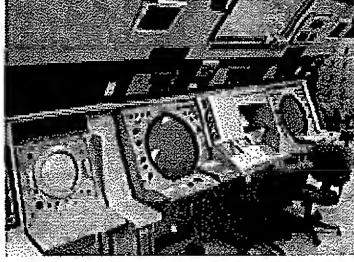
**Table 10. Aircraft and Related Articles, Continued**

Description of items for DEMIL coding	DEMIL Code
(23) Filtered and unfiltered cockpit panel knobs, indicators, switches, buttons, and dials.	A
(24) Lead-acid and nickel-cadmium batteries	A
(25) Propellers, propeller systems, and propeller blades used with reciprocating engines.	A
(26) Fire extinguishers.	A
(27) Flame and smoke/carbon dioxide detectors.	A
(28) Map cases.	A
(29) Military aircraft that were first manufactured from 1946 to 1955 that do not incorporate defense articles listed or otherwise described on the USML, unless the items are required to meet safety or airworthiness standards of a Wassenaar Arrangement Participating State (found on website <a href="http://www.wassenaar.org">www.wassenaar.org</a> ); and do not incorporate weapons listed or otherwise described on the USML in accordance with Part 121.1 of Title 22, CFR, unless inoperable and incapable of being returned to operation.	A
(30) Parts, components, accessories, and attachments, other than electronic items or navigation equipment, for use in or with an item described in Paragraph (h).	A
(31) Identification plates.	A
(32) Fluid manifolds.	A
<b>ECCN 9B610</b>	<b>Test, inspection, and production equipment and related commodities specially designed for the development or production of commodities listed in ECCN 9A610 or Part 1 USML Category VIII.</b>
(a) Test, inspection, and production equipment specially designed for the production, development, repair, overhaul, or refurbishment of commodities listed in ECCN 9A610 in Part 2 or Part 1, and parts, components, accessories, and attachments specially designed.	C
(b) Environmental test facilities designed for the certification, qualification, or testing of commodities listed in ECCN 9A610 in Part 2 or Part 1 and parts, components, accessories, and attachments specially designed.	C
(c) Production facilities designed or modified for UAVs or drones that are described by either Paragraph (a), Part 1 or for Paragraph (a) ECCN 9A610 and capable of a range equal to or greater than 300 km.	C

**Table 10. Aircraft and Related Articles, Continued**

Description of items for DEMIL coding		DEMIL Code
ECCN 9C610	Materials specially designed for items described by Part 1 or Part 2 ECCN 9A610 not elsewhere specified in Tables 3 through 23 or the CCL.	
(a) Materials not elsewhere specified in the CCL or Part 1 of Tables 3 through 23 and specially designed for commodities listed in this table.		Q
(b) Reserved.		N/A
<b>INTERPRETATIONS:</b> Aircraft specially designed for military applications that are not described in Paragraph (a) of this table are subject to the EAR in accordance with Parts 730-774 of Title 15, CFR and described in ECCN 9A610 as Part 2, including any unarmed military aircraft, regardless of origin or designation, manufactured before 1956 and unmodified since manufacture. Modifications made to incorporate safety of flight features or other Federal Aviation Administration or National Transportation Safety Board modifications such as transponders and air data recorders are considered unmodified for the purposes of this paragraph.		

**Table 11. Military Training Equipment**

			
<b>Description of items for DEMIL coding</b>			<b>DEMIL Code</b>
<b>Part 1. Military Training Equipment described in USML Category IX</b>			
(a) Training equipment.			
(1) Ground, surface, submersible, space, or towed airborne targets that:			
a. Have an infrared, radar, acoustic, magnetic, or thermal signature that mimic a specific defense article, other item, or specific person; or		C	
b. Are instrumented to provide hit or miss performance information for defense articles described in Tables 3-23.		C	
(2) Devices that are mockups of articles listed on the USML used for maintenance training or disposal training for ordnance in Part 1 of Tables 5, 6, and 7 that reveal technical data or contain parts, components, accessories, or attachments described in the USML.		C	
(3) Air combat maneuvering instrumentation and ground stations.		C	
(4) Physiological flight trainers for fighter aircraft or attack helicopters.		C	
(5) Radar trainers specially designed for training on radar described in Part 1 of Table 13.		C	
(6) Training devices specially designed to be attached to a crew station, mission system, or weapon of an article controlled on the USML.		C	
(7) Anti-submarine warfare trainers.		C	
(8) Missile launch trainers.		C	
(9) Radar target generators.		C	
(10) Infrared scene generators.		C	
♦ (11) Any training device that:			
a. Is classified.		P	
b. Contains classified software.		P	
c. Is unclassified but being developed using classified information.		D	

**Table 11. Military Training Equipment, Continued**

<b>Description of items for DEMIL coding</b>	<b>DEMIL Code</b>
(b) Simulators:	
(1) System specific simulators that replicate the operation of an individual crew station, a mission system, or a weapon of an end item that is described in Tables 3-23.	C
(2) Reserved.	N/A
(3) Reserved.	N/A
(4) Software and associated databases.	N/A
♦ (5) Simulators that:	
a. Are classified.	P
b. Contain classified software.	P
c. Are being developed using classified information.	D
(c) Reserved.	N/A
(d) Reserved.	N/A
(e) Decals, labels, and technical manuals containing technical data directly related to the items listed described as either:	
(1) Classified or	P
(2) Unclassified.	D
(f) through (w) Reserved.	N/A

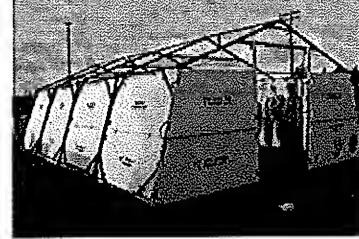
**Part 2. Military items described in the CCL**

<b>ECCN 0A614</b>	<b>Military training equipment.</b>	
(a) Equipment specially designed for military training that is not listed or otherwise described in Part 1.		Q
(b) through (w) Reserved.		N/A
(x) Specially designed parts, components, accessories, and attachments that are for an item described in Paragraph (a) or a defense article in Part 1.		Q

**Table 11. Military Training Equipment, Continued**

<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
<b>ECCN 0B614</b>		<b>Test, inspection, and production equipment for military training equipment and specially designed parts, components, accessories and attachments</b>
(a)	Test, inspection, and other production equipment specially designed for the development, production, repair, overhaul, or refurbishing of items described in ECCN 0A614 of Part 2 or articles listed or otherwise described in Part 1.	Q
(b) through (w)	Reserved.	N/A
(x)	Parts, components, accessories, and attachments that are specially designed for an item described for ECCN 0B614 in Paragraph (a), Part 2.	Q
<b>INTERPRETATIONS:</b> Parts, components, accessories, or attachments of a simulator in this table that are common to the system or end item being simulated are contained in the table of the simulated system or simulated end item.  ECCN 0A614 includes operational flight trainers, radar target trainers, flight simulators for aircraft classified under ECCN 9A610, Paragraph (a), Part 2, human-rated centrifuges, radar trainers for radars classified under ECCN 3A611, Part 2 of Table 13, instrument flight trainers for military aircraft, navigation trainers for military items, target equipment, armament trainers, military pilotless aircraft trainers, mobile training units and training equipment for ground military operations.		

**Table 12. Personal Protective Equipment**

			
<b>Description of items for DEMIL coding</b>			<b>DEMIL Code</b>
<b>Part 1. Personal Protective Equipment described in USML Category X</b>			
(a) Personal protective equipment:			
(1) Body armor providing a protection level equal to or greater NIJ Classification, NIJ Standard 0101.06 Type IV.			D
(2) Personal protective clothing, equipment, or face paints specially designed to protect against or reduce detection by radar, infrared, or other sensors at wavelengths greater than 900 nanometers (nm).			D
(3) Reserved.			N/A
(4) Reserved.			N/A
(5) Integrated helmets, not specified in Paragraph (h)(15), Part 1 of Table 10 or Part 1 of Table 14, incorporating optical sights or slewing devices, which include the ability to aim, launch, track, or manage munitions.			D
(6) Helmets and helmet shells providing a protection level equal to or greater than NIJ Standard-0101.06 Type IV.			D
(7) Goggles, spectacles, or visors, employing other than common broadband absorptive dyes and ultraviolet inhibitors as a means of protection (e.g., narrow band filters or dyes or broadband limiters or coatings with high visible transparency), with optical density greater than 3 that protect against: <ul style="list-style-type: none"> <li>a. Visible (in-band) laser wavelengths.</li> <li>b. Thermal flashes associated with nuclear detonations, or</li> <li>c. Near infrared or ultraviolet (out of band) laser wavelengths.</li> </ul>			D
(8) Developmental personal protective equipment and specially designed parts, components, accessories, and attachments, developed for the DoD via contract or other funding authorization.			D
(b) Reserved.			N/A
(c) Reserved.			N/A
(d) Parts, components, assemblies, and associated equipment for the personal protective equipment described in this part:			

**Table 12. Personal Protective Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
(1) Ceramic or composite plates that provide protection equal to or greater than NIJ Standard 0101.06 Type IV.	D
(2) Lenses, substrates, or filters specially designed for the items described in Paragraph (a)(7).	D
(3) Materials and coatings specially designed for the articles covered in Paragraph (a)(7) with optical density greater than 3:	
a. Narrowband absorbing dyes.	D
b. Broadband optical switches or limiters (i.e., nonlinear material, tunable or switchable agile filters, optical power limiters, near infrared interference based filters).	D
c. Narrowband interference based notch filters (i.e., multi-layer dielectric coatings, rugate, holograms or hybrid interference with dye) protecting against multiple laser wavelength and having high visible band transparency.	D
♦ (4) Any component, part, accessory, attachment, equipment, or system that:	
a. Is classified.	P
b. Contains classified software.	P
c. Is unclassified but being developed using classified information.	D
(e) Decals, labels, and technical manuals containing technical data directly related to the items listed in this table described as either:	
(1) Classified or	P
(2) Unclassified.	D
(f) through (w) Reserved.	N/A

**Part 2. Military items described in the CCL**

ECCN 1A613	Armored and protective equipment and related commodities.
(a) Armored plate specially designed for military use and not described in Part 1 of Tables 3 to 23.	D
(b) Shelters specially designed to:	
(1) Provide ballistic protection for military systems; or	D
(2) Protect against nuclear, biological, or chemical contamination.	D
(c) Military helmets (other than conventional military steel helmets) providing less than NIJ Type IV protection and helmet shells, liners, or comfort pads.	D

**Table 12. Personal Protective Equipment, Continued**

<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
(d) Body armor and protective garments:		
(1) Soft body armor and protective garments manufactured to military standards or specifications, or to their equivalents, that provide ballistic protection equal to or less than NIJ Type III in accordance with NIJ Standard 0101.06.	D	
(2) Hard body armor plates that provide ballistic protection equal to NIJ Type III in accordance with NIJ Standard 0101.06 or national equivalents.	D	
(e) Atmospheric diving suits specially designed for rescue operations for submarines described in the USML or the CCL.	Q	
(f) Other personal protective equipment specially designed for military applications not described in the USML, not elsewhere controlled on the CCL.	Q	
(g) through (w) Reserved.	N/A	
(x) Specially designed parts, components, accessories, and attachments that are for an item listed in this ECCN or a defense article in Part 1 and not listed in Paragraph (y), Part 2.	Q	
(y) Other commodities:		
(1) Conventional military steel helmets.	A	
ECCN 1B613	<b>Test, inspection, and production equipment and related commodities specially designed for the development, production, repair, overhaul, or refurbishing of commodities described in ECCN 1A613 or USML Category X.</b>	
(a) Test, inspection, and production equipment, not described in Paragraph (c), Part 1, that is specially designed for the development, production, repair, overhaul, or refurbishing of commodities described in ECCN 1A613 and listed in this table.	Q	
(b) Plasma pressure compaction equipment specially designed for the production of ceramic or composite body armor plates described in ECCN 1A613 in Part 2 or Part 1.	Q	
<b>INTERPRETATIONS:</b> See ECCN 1A005 for controls on soft body armor not manufactured to military standards or specifications and hard body armor plates providing less than NIJ Type III protection.		

**Table 13. Military Electronics**



Description of items for DEMIL coding		DEMIL Code
<b>Part 1. Military electronics described in USML Category XI</b>		
♦ (a) Electronic equipment and systems not included in Part 1 of Table 14:		
♦ (1) Underwater hardware, equipment, or systems:		D
a. Active or passive acoustic array sensing systems or acoustic array equipment capable of real-time processing that survey or detect and also track, localize (e.g., determine range and bearing), classify, or identify, surface vessels, submarines, other undersea vehicles, torpedoes, or mines, having:		
1. Multi-static capability;		
2. Operating frequency less than 20 kilohertz (kHz); or		
3. Operating bandwidth greater than 10 kHz.		
b. Underwater single acoustic sensor system that distinguishes non-biologic tonals and locates the origin of the sound.		D
c. Non-acoustic systems that survey or detect and also track, localize (e.g., determine range and bearing), classify, or identify, surface vessels, submarines, other undersea vehicles, torpedoes, or mines.		D
d. Acoustic modems, networks, and communications equipment with real-time adaptive compensation or employing LPI of an underwater modem to assess the water conditions to select the best algorithm to receive and transmit data. An underwater modem with the capability to assess the water conditions to select the best algorithm to receive and transmit data is considered adaptive compensation.		D
e. Low frequency or very low frequency electronic modems, routers, interfaces, and communications equipment, specially designed for submarine communications.		D

Table 13. Military Electronics, Continued

Description of items for DEMIL coding	DEMIL Code
f. Autonomous systems and equipment that enable cooperative sensing and engagement by fixed (bottom mounted or seabed) or mobile autonomous underwater vehicles.	D
♦ (2) Underwater acoustic countermeasures or counter-countermeasures systems or equipment.	D
♦ (3) Radar systems and equipment:	
a. Airborne radar that maintains positional state of an object or objects of interest, other than weather phenomena, in a received radar signal through time;	D
b. Synthetic aperture radar incorporating image resolution less than (better than) 0.3 meter, or incorporating coherent change detection with geo-registration accuracy less than (better than) 0.3 meter, not including concealed object detection equipment operating in the frequency range from 30 gigahertz (GHz) to 3,000 GHz and having a spatial resolution of 0.1 milliradians up to and including 1 milliradian at a standoff distance of 100 meters;	D
c. Inverse synthetic aperture radar;	D
d. Radar that geodetically-locates (i.e., geodetic latitude, geodetic longitude, and geodetic height) with a target location error 50 less than or equal to 10 meters at ranges greater than 1 km;	D
e. Any ocean surveillance radar with an average-power-aperture product of greater than 50 Wm <sup>2</sup> ;	D
f. Any ocean surveillance radar that transmits a waveform with an instantaneous bandwidth greater than 100 megahertz (MHz) and has an antenna rotation rate greater than 60 revolutions per minute;	D
g. Air surveillance radar with free space detection of 1 square meter radar cross section (RCS) target at 85 nmi or greater range, scaled to RCS values as RCS to the 1/4 power;	D
h. Air surveillance radar with free space detection of 1 square meter RCS target at an altitude of 65,000 feet and an elevation angle greater than 20 degrees (e.g., counter-battery);	D
i. Air surveillance radar with multiple elevation beams, phase or amplitude monopulse estimation, or 3D height-finding;	D
j. Air surveillance radar with a beam solid angle less than or equal to 16 degrees squared that performs free space tracking of 1 square meter RCS target at a range greater or equal to 25 nmi with revisit rate greater or equal to 1/3 Hz;	D

Table 13. Military Electronics, Continued

Description of items for DEMIL coding	DEMIL Code
k. Instrumentation radar for anechoic test facility or outdoor range that maintains positional state of an object of interest in a received radar signal through time or provides measurement of RCS of a static target less than or equal to minus 10 RCS of target in decibels, or RCS of a dynamic target;	D
l. Radar incorporating pulsed operation with electronics steering of transmit beam in elevation and azimuth;	D
m. Radar with mode(s) for ballistic tracking or ballistic extrapolation to source of launch or impact point of articles listed in Part 1 of Tables 5, 6, or 17;	D
n. Active protection radar and missile warning radar with mode(s) implemented for detection of incoming munitions;	D
o. Over the horizon high frequency sky-wave (ionosphere) radar.	D
p. Radar that detects a moving object through a physical obstruction at distance greater than 0.2 meter from the obstruction;	D
q. Radar having moving target indicator or pulse-Doppler processing where any single Doppler filter provides a normalized clutter attenuation of greater than 60 decibel (dB);	D
r. Radar having electronic protection or electronic counter-countermeasures other than manual gain control, automatic gain control, radio frequency selection, constant false alarm rate, and pulse repetition interval jitter;	D
s. Radar employing electronic attack mode(s) using the radar transmitter and antenna;	D
t. Radar employing electronic support mode(s) (i.e., the ability to use a radar system for electronic support purposes in one or more of the following: as a high-gain receiver, as a wide-bandwidth receiver, as a multi-beam receiver, or as part of a multi-point system);	D
u. Radar employing non-cooperative target recognition (i.e., the ability to recognize a specific platform type without cooperative action of the target platform);	D
v. Radar employing automatic target recognition (i.e., recognition of target using structural features (e.g., tank versus car) of the target with system resolution better than (less than) 0.3 meter);	D
w. Radar that sends interceptor guidance commands or provides illumination keyed to an interceptor seeker;	D
x. Radar employing waveform generation for LPI other than frequency modulated continuous wave with linear ramp modulation;	D
y. Radar that sends and receives communications;	D

**Table 13. Military Electronics, Continued**

Description of items for DEMIL coding	DEMIL Code
z. Radar that tracks or discriminates ballistic missile warhead from debris or countermeasures;	D
aa. Bi-static or multi-static radar that exploits greater than 125 kHz bandwidth and is lower than 2 GHz center frequency to passively detect or track using radio frequency (RF) transmissions (e.g., commercial radio, television stations);	C
ab. Radar target generators, projectors, or simulators, specially designed for radars described in this table; or	D
ac. Radar and laser radar systems specially designed for defense articles in Paragraph (a)(1), Part 1, Table 6 or Paragraphs (a)(5), (a)(6), or (a)(13), Part 1, Table 10.	D
♦ (4) Electronic combat (i.e., electronic warfare) systems and equipment:	
a. Electronic support systems and equipment that search for, intercept and identify, or locate sources of intentional or unintentional electromagnetic energy specially designed to provide immediate threat detection, recognition, targeting, planning, or conduct of future operations;	D
b. Systems and equipment that detect and automatically discriminate acoustic energy emanating from weapons fire (e.g., gunfire, artillery, rocket propelled grenades, or other projectiles), determining location or direction of weapons fire in less than 2 seconds from receipt of event signal, and able to operate on-the-move (e.g., operating on personnel, land vehicles, sea vessels, or aircraft while in motion); or	D
c. Systems and equipment specially designed to introduce extraneous or erroneous signals into radar, infrared based seekers, electro-optic based seekers, radio communication receivers, navigation receivers, or that otherwise hinder the reception, operation, or effectiveness of adversary electronics (e.g., active or passive electronic attack, electronic countermeasure, electronic counter-countermeasure equipment, jamming, and counter jamming equipment).	D
♦ (5) Command, control, and communications; command, control, communications, and computers; command, control, communications, computers, intelligence, surveillance, and reconnaissance, and identification systems or equipment:	
a. Are specially designed to integrate, incorporate, network, or employ defense articles that are described in this table that do not use the term specially designed.	D
b. Incorporate U.S. Government identification friend or foe modes 4 or 5.	D

Table 13. Military Electronics, Continued

Description of items for DEMIL coding	DEMIL Code
c. Implement active or passive electronic counter-countermeasures used to counter acts of communication disruption (e.g., radios that incorporate HAVE QUICK I/II, single channel ground and airborne radio system, Second Generation Antijam Tactical Ultrahigh Frequency Radio for North Atlantic Treaty Organization).	D
d. Specially designed, rated, certified, or otherwise specified or described to be in compliance with U.S. Government National Security Telecommunications and Information Systems Security Advisory Memorandum TEMPEST 1-92 standards or Committee on National Security Systems Advisory Memorandum TEMPEST 01-02, to implement techniques to suppress compromising emanations of information bearing signals.	D
e. Transmit voice or data signals specially designed to elude electromagnetic detection.	D
(6) Reserved.	N/A
(7) Developmental electronic equipment or systems funded by the DoD.	C
(8) Unattended ground sensor systems or equipment having all of the following: a. Automatic target detection. b. Automatic target tracking, classification, recognition, or identification. c. Self-forming or self-healing networks. d. Self-localization for geo-locating targets.	D
(9) Electronic sensor systems or equipment for non-acoustic antisubmarine warfare or mine warfare (e.g., magnetic anomaly detectors, electric-field, electromagnetic induction).	D
(10) Electronic sensor systems or equipment for detection of concealed weapons, having a standoff detection range of greater than 45 meters for personnel or detection of vehicle-carried weapons, not including concealed object detection equipment operating in the frequency range from 30 GHz to 3,000 GHz and having a spatial resolution of 0.1 milliradians up to and including 1 milliradians at a standoff distance of 100 m.	D
(11) Test sets specially designed for testing defense articles described in Paragraphs (a)(3), (a)(4), (a)(5), or (b).	D
(12) Direction finding equipment for determining bearings to specific electromagnetic sources or terrain characteristics specially designed for defense articles in Paragraph (a)(1), Part 1 of Table 6 or Paragraphs (a)(5), (a)(6), or (a)(13), Part 1 of Table 10.	D

**Table 13. Military Electronics, Continued**

Description of items for DEMIL coding	DEMIL Code
♦ (b) Electronic systems or equipment, not elsewhere described in Tables 3-23, specially designed for intelligence purposes that collect, survey, monitor, or exploit the electromagnetic spectrum (regardless of transmission medium), or for counteracting such activities.	D
(c) Parts, components, accessories, attachments, and associated equipment: <ul style="list-style-type: none"> <li data-bbox="300 608 1302 686">(1) Application specific integrated circuits (ASICs) and programmable logic devices (PLD) programmed for defense articles in this table.</li> <li data-bbox="300 699 1302 777">(2) Printed circuit boards and populated circuit card assemblies for which the layout is specially designed for defense articles in this table.</li> <li data-bbox="300 789 1302 868">(3) Multichip modules for which the pattern or layout is specially designed for defense articles in this table.</li> <li data-bbox="300 880 1302 973">(4) Transmit or receive modules or transmit modules that have any two perpendicular sides, with either length d (in cm) equal to or less than 15 divided by the lowest operating frequency in GHz:</li> </ul>	D D D D
<p data-bbox="344 1009 768 1045">[<math>d \leq 15\text{cm} * \text{GHz}/\text{frequency in GHz}</math>]</p> <p data-bbox="344 1081 1290 1184">With an electronically variable phase shifter or phasers that are a monolithic microwave integrated circuit (MMIC) or incorporate a MMIC or discrete RF power transistor.</p>	D
<ul style="list-style-type: none"> <li data-bbox="300 1199 1302 1339">(5) High-energy storage capacitors with a repetition rate of 6 discharges or more per minute and full energy life greater than or equal to 10,000 discharges, at greater than 0.2 amps per joule peak current, that have any of the following:           <ul style="list-style-type: none"> <li data-bbox="344 1368 1302 1446">a. Volumetric energy density greater than or equal to 1.5 joules per cubic centimeter; or</li> <li data-bbox="344 1459 1302 1495">b. Mass energy density greater than or equal to 1.3 kilojoules per kilogram.</li> </ul> </li> </ul>	D
<ul style="list-style-type: none"> <li data-bbox="300 1495 1302 1592">(6) Radio frequency circulators of any dimension equal to or less than one quarter wavelength of the highest operating frequency and isolation greater than 30 dB.</li> </ul>	D
<ul style="list-style-type: none"> <li data-bbox="300 1622 1302 1700">(7) Polarimeter that detects and measures polarization of RF signals within a single pulse.</li> </ul>	D
<ul style="list-style-type: none"> <li data-bbox="300 1721 1302 1839">(8) Digital RF memory with RF instantaneous input bandwidth greater than 400 MHz, and 4 bit or higher resolution whose output signal is a translation of the input signal (e.g., changes in magnitude, time, frequency) and specially designed parts and components.</li> </ul>	D
(9) Vacuum electronic devices:	

Table 13. Military Electronics, Continued

Description of items for DEMIL coding	DEMIL Code
a. Multiple electron beam or sheet electron beam devices rated for operation at frequencies of 16 GHz or above, and with a saturated power output greater than 10,000 W (70 decibel-milliwatts (dBm)) or a maximum average power output greater than 3,000 W (65 dBm); or	D
b. Cross-field amplifiers with a gain of 15 dB to 17 dB or a duty factor greater than 5 percent.	D
(10) Antenna and specially designed parts and components that:	
a. Employ four or more elements, electronically steer angular beams, independently steer angular nulls, create angular nulls with a null depth greater than 20 dB, and achieve a beam switching speed faster than 50 milliseconds;	D
b. Form adaptive null attenuation greater than 35 dB with convergence time less than one second;	D
c. Detect signals across multiple RF bands with matched left hand and right hand spiral antenna elements for determination of signal polarization; or	D
d. Determine signal angle of arrival less than two degrees (e.g., interferometer antenna).	D
(11) Radomes or electromagnetic antenna windows that:	
a. Incorporate radio frequency selective surfaces;	D
b. Operate in multiple non-adjacent frequency bands for radar applications;	D
c. Incorporate a structure that is specially designed to provide ballistic protection from bullets, shrapnel, or blast;	D
d. Have a melting point greater than 1,300° Celsius and maintain a dielectric constant less than 6 at temperatures greater than 500° Celsius;	D
e. Are manufactured from ceramic materials with a dielectric constant less than 6 at any frequency from 100 MHz to 100 GHz;	D
f. Maintain structural integrity at stagnation pressures greater than 6,000 pounds per square foot; or	D
g. Withstand combined thermal shock greater than $4.184 \times 10^6$ joules per square meter accompanied by a peak overpressure of greater than 50 kilopascal.	D
(12) Underwater sensors (acoustic vector sensors, hydrophones, or transducers) or projectors, specially designed for systems described in Paragraphs (a)(1) and (a)(2), having any of the following:	
a. A transmitting frequency below 10 kHz for sonar systems.	D

**Table 13. Military Electronics, Continued**

Description of items for DEMIL coding	DEMIL Code
<ul style="list-style-type: none"> <li>b. Sound pressure level exceeding 224 dB (reference 1 megapascal (mPa) at 1 meter) for equipment with an operating frequency in the band from 10 kHz to 24 kHz.</li> <li>c. Sound pressure level exceeding 235 dB (reference 1 mPa at 1 meter) for equipment with an operating frequency in the band between 24 kHz and 30 kHz.</li> <li>d. Forming beams of less than 1° on any axis and having an operating frequency of less than 100 kHz.</li> <li>e. Designed to operate with an unambiguous display range exceeding 5,120 meters.</li> <li>f. Designed to withstand pressure during normal operation at depths exceeding 1,000 m and having transducers with any of the following: <ul style="list-style-type: none"> <li>1. Dynamic compensation for pressure.</li> <li>2. Incorporating other than lead zirconate titanate as the transduction element.</li> </ul> </li> </ul>	
(13) Parts or components containing piezoelectric materials which are specially designed for underwater hardware, equipment, or systems described in Paragraph (c)(12).	D
(14) Tuners specially designed for systems and equipment in Paragraphs (a)(4) and (b).	D
(15) Electronic assemblies and components, capable of operation at temperatures in excess of 125° Celsius and specially designed for UAVs or drones described in Part 1 of Table 10, rockets, SLVs, or missiles described in Part 1 of Table 6 capable of achieving a range greater than or equal to 300 km.	D
(16) Hybrid (combined analog and digital) computers specially designed for modeling, simulation, or design integration of systems described in Paragraphs (a)(1), (d)(1), (d)(2), (h)(1), (h)(2), (h)(4), (h)(8), and (h)(9) of Table 6 or Paragraphs (a)(5), (a)(6), or (a)(13) of Part 1, Table 10.	D
(17) Chaff and flare rounds specially designed for the systems and equipment described in Paragraph (a)(4)(c) of Part 1, and parts and components containing materials described in Part 1 of Table 7.	G
(18) Parts, components, or accessories specially designed for a cyber security/information security system or radio, listed in this table that modify its published properties (e.g., frequency range, algorithms, waveforms, CODECs, modulation or demodulation schemes); or	D
<ul style="list-style-type: none"> <li>♦ (19) Any part, component, accessory, attachment, equipment, or system that: <ul style="list-style-type: none"> <li>a. Is classified.</li> </ul> </li> </ul>	P

**Table 13. Military Electronics, Continued**

Description of items for DEMIL coding	DEMIL Code
b. Contains classified software. c. Is unclassified but being developed using classified information.	P D
(d) Decals, labels, and technical manuals containing technical data directly related to the items described in Paragraphs (a) through (e) and items described as ECCNs 3A611 or 3B611 in Part 2:  (1) Classified.  (2) Unclassified.	P D
(e) through (w) Reserved.	N/A

**Part 2. Military items described in the CCL**

ECCN 3A611	Military electronics.
(a) Electronic equipment, end items, and systems specially designed for a military application that are not described or otherwise described in either a Part 1 or another Part 2 600 series item in another table.	D
(b) Reserved.	N/A
(c) Reserved.	N/A
(d) Reserved.	N/A
(e) High frequency surface wave radar that maintains the positional state of maritime surface or low altitude airborne objects of interest in a received radar signal through time.	D
(f) ASICs and PLD that are programmed for 600 series items.	D
(g) Printed circuit boards and populated circuit card assemblies that are not specifically identified in Paragraph (y) for which the layout is specially designed for 600 series items.	D
(h) Multichip modules that are not specifically identified in Paragraph (y) for which the pattern or layout is specially designed for 600 series items.	D
(i) through (w) Reserved.	N/A
(x) Parts, components, accessories, and attachments that are specially designed for a commodity described in this entry or for an article described in Part 1, and not described or described in Part 1 of Tables 3 to 23 or another Part 2 ECCN and not described in Paragraph (y) of this table.	Q
(y) Specific parts, components, accessories, and attachments specially designed for a commodity described in a 600 series or Part 1 Tables 3 to 23.	

Table 13. Military Electronics, Continued

Description of items for DEMIL coding	DEMIL Code
(1) Electrical connectors.	A
(2) Electric fans.	A
(3) Heat sinks.	A
(4) Joy sticks.	A
(5) Mica paper capacitors.	A
(6) Microphones.	A
(7) Potentiometers.	A
(8) Rheostats.	A
(9) Electric connector backshells.	A
(10) Solenoids.	A
(11) Speakers.	A
(12) Trackballs.	A
(13) Electric transformers.	A
(14) ASICs and PLD that are programmed for a Part 2 ECCN item described in Tables 3 to 23.	A
(15) Printed circuit boards and populated circuit card assemblies for which the layout is specially designed for an item described in Paragraph (y) of any 600 series ECCN in Tables 3 to 23.	A
(16) Multichip modules for which the pattern or layout is specially designed for an item described in Paragraph (y) of any 600 series ECCN in Tables 3 to 23.	A
(17) Circuit breakers.	A
(18) Ground fault circuit interrupters.	A
(19) Electrical contacts.	A
(20) Electrical guide pins.	A
(21) Filtered and unfiltered mechanical switches.	A
(22) Thumbwheels.	A
(23) Fixed resistors.	A
(24) Electrical jumpers.	A
(25) Grounding straps.	A
(26) Indicator dials.	A
(27) Contactors.	A
(28) Touchpads.	A
(29) Mechanical caps.	A

**Table 13. Military Electronics, Continued**

<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
(30) Mechanical plugs.		A
(31) Finger barriers.		A
(32) Flip-guards.		A
(33) Identification plates and nameplates.		A
(34) Knobs.		A
(35) Hydraulic, pneumatic, fuel, and lubrication gauges.		A
<b>ECCN 3B611</b>	<b>Test, inspection, and production commodities for military electronics.</b>	
(a) Test, inspection, and production end items and equipment specially designed for the development, production, repair, overhaul, or refurbishing of items described in ECCN 3A611 (except ECCN 3A611 Paragraph (y)) or Part 1 that are not explicitly described in Part 1 or described in another 600 series ECCN.		C
(b) through (w) Reserved.		N/A
(x) Parts, components, accessories, and attachments that are specially designed for an item in Paragraph (a) and that are not described on the USML or described in another 600 series ECCN.		Q
<b>ECCN 9A620</b>	<b>Cryogenic and superconductive equipment</b>	
(a) Equipment specially designed to be installed in a vehicle for military ground, marine, airborne, or space applications, and capable of operating while in motion and of producing or maintaining temperatures below 103 Kelvin (-170°Celsius).		Q
(b) Superconductive electrical equipment (rotating machinery and transformers) specially designed to be installed in a vehicle for military ground, marine, airborne, or space applications, and capable of operating while in motion.		Q
(c) through (w) Reserved.		N/A
(x) Parts, components, accessories and attachments that are specially designed for an item described in ECCN 9A620.		Q
<b>ECCN 9B620</b>	<b>Test, inspection, and production commodities for cryogenic and superconductive equipment</b>	
(a) Test, inspection, and production end items and equipment specially designed for the development, production, repair, overhaul, or refurbishing of items described in ECCN 9A620, Part 2.		Q
(b) Reserved.		N/A

**Table 14. Fire Control, Laser, Imaging, and Guidance Equipment**

Description of items for DEMIL coding	DEMIL Code
<b>Part 1. Fire Control, Laser, Imaging, and Guidance Equipment described in USML Category XII</b>	
<p>(a) Fire control, aiming, detection, guidance, and tracking systems:</p> <ul style="list-style-type: none"> <li>◆ (1) Fire control systems. D</li> <li>◆ (2) Electronic or optical weapon positioning, laying, or spotting systems. D</li> <li>◆ (3) Laser spot trackers or laser spot detection, location, or imaging systems, with an operational wavelength shorter than 400 nm or longer than 710 nm and that are for laser target designators or coded target markers listed in Paragraph (b)(1). D</li> <li>◆ (4) Bomb sights or bombing computers. D</li> <li>◆ (5) Electro-optical systems that automatically detect and locate ordnance launch, blast, or fire. D</li> <li>◆ (6) Electro-optical ordnance guidance systems. D</li> <li>◆ (7) Missile or ordnance electro-optical tracking systems. D</li> <li>◆ (8) Remote wind-sensing systems specially designed for ballistic-corrected aiming. D</li> </ul> <p>(9) Helmet mounted display (HMD) systems or end items (e.g., combat vehicle crew HMD, mounted warrior HMD, integrated helmet assembly subsystem, drivers head tracked vision system), other than such items controlled in USML Category VIII, that:</p> <ul style="list-style-type: none"> <li>a. Incorporate or interface (either via wired or wireless connection) with optical sights or slewing devices that aim, launch, track, or manage munitions.</li> <li>b. Control infrared imaging systems or end items described in Paragraphs (a) through (d).</li> </ul> <p>◆ (b) Laser systems and end items:</p> <ul style="list-style-type: none"> <li>(1) Laser target designators or coded target markers that mediate the delivery of ordnance to a target. D</li> </ul>	

**Table 14. Fire Control, Laser, Imaging, and Guidance and Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
(2) Target illumination systems having a variable beam divergence and a laser output wavelength exceeding 710 nm, to artificially light an area to search, locate, or track a target.	D
(3) Laser rangefinders having any of the following: a. Output wavelength of 1064 nm and any Q-switched pulse output. b. Output wavelength exceeding 1064 nm and any of the following: 1. Single or multiple shot(s) within one second ranging capability of 3 km or greater against a standard 2.3 m x 2.3 m North Atlantic Treaty Organization target having 10 percent reflectivity and 23 km atmospheric visibility. 2. Multiple shot ranging capability at 3 Hz or greater of 1 km or greater against a standard 2.3 m x 2.3 m North Atlantic Treaty Organization target having 10 percent reflectivity and 23 km atmospheric visibility.	D
(4) Targeting systems and target location systems, incorporating or specially designed to incorporate both of the following: a. A laser rangefinder. b. A defense article listed in Paragraph (d).	D
(5) Systems specially designed to use laser energy with an output wavelength exceeding 710 nm for exploiting differential target-background retro-reflectance in order to detect optical or electro-optical equipment (e.g., optical augmentation systems).	D
(6) Light detection and ranging, laser detection and ranging, or range-gated systems, specially designed for a military end user.	D
(7) Developmental lasers or laser systems funded by the DoD via contract or other funding authorization.	D
♦ (c) Imaging systems or end items: (1) Binoculars, bioculars, monoculars, goggles, or head or helmet-mounted imaging systems (including video-based articles having a separate near-to-eye display). a. Employing an autogated third generation image intensifier tube or a higher generation image intensifier tube. b. Fusing output of an image intensifier tube and an infrared focal plane array having a peak response wavelength greater than 1,000 nm. c. Having an infrared focal plane array or infrared imaging camera, and specially designed for a military end user. (2) Weapon sights (i.e., with a reticle) or aiming or imaging systems (e.g., clipon), specially designed to mount to a weapon or to withstand weapon shock or recoil, with or without an integrated viewer or display, and also incorporating or specially designed to incorporate any of the following:	D

**Table 14. Fire Control, Laser, Imaging, and Guidance and Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
<ul style="list-style-type: none"> <li>a. An infrared focal plane array having a peak response wavelength exceeding 1,000 nm.</li> </ul>	
<ul style="list-style-type: none"> <li>b. Second generation with luminous sensitivity greater than 350 milliamperes lumens, third generation, or higher generation, image intensifier tubes.</li> </ul>	
<ul style="list-style-type: none"> <li>c. Ballistic computing electronics for adjusting the aim point display.</li> <li>d. Infrared laser having a wavelength exceeding 710 nm.</li> </ul>	
<ul style="list-style-type: none"> <li>(3) Electro-optical reconnaissance, surveillance, target detection, or target acquisition systems, specially designed for articles in this table or specially designed for a military end user.</li> </ul>	D
<ul style="list-style-type: none"> <li>(4) Infrared search and track systems having one of the following:</li> </ul>	D
<ul style="list-style-type: none"> <li>a. Airborne or naval systems, that:           <ul style="list-style-type: none"> <li>1. Have range performance of 3 km or greater.</li> <li>2. Incorporate or are specially designed to incorporate an infrared focal plane array or imaging camera, having a peak response wavelength exceeding 3 microns or greater.</li> <li>3. Maintain positional or angular state of a target through time; or</li> <li>b. Specially designed for a military end user.</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>(5) Distributed aperture systems having a peak response wavelength exceeding 710 nm specially designed for articles in this table or specially designed for a military end user.</li> </ul>	D
<ul style="list-style-type: none"> <li>(6) Infrared imaging systems:           <ul style="list-style-type: none"> <li>a. Mobile reconnaissance, scout, or surveillance systems providing real-time target recognition at ranges greater than 3 km (e.g., long range advanced scout surveillance system, commanders independent sight, horizontal technology integration, SeeSpot, meteorological measuring set).</li> <li>b. Airborne stabilized systems specially designed for military reconnaissance (e.g., DB-110, C-B4).</li> <li>c. Multispectral imaging systems that provide automated classification or identification of military or intelligence targets or characteristics.</li> <li>d. Automated missile detection or warning systems.</li> <li>e. Systems hardened to withstand electromagnetic pulse, directed energy, chemical, biological, or radiological threats.</li> <li>f. Systems incorporating mechanism(s) to reduce the optical chain signature for optical augmentation.</li> <li>g. Persistent surveillance systems with a ground sample distance (GSD) of 0.5 m or better (smaller) at 10,000 ft or higher above ground level and a simultaneous coverage area of 3 square kilometer or greater.</li> <li>h. Gimbaled infrared systems:</li> </ul> </li> </ul>	D

**Table 14. Fire Control, Laser, Imaging, and Guidance and Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
<p>1. Having a stabilization better (less) than 30 microradians root-mean-square and a turret with a ball diameter of 15 inches or greater.</p> <p>2. Specially designed for articles in Tables 3 to 23 or specially designed for a military end user.</p>	
<p>(7) Terahertz imaging systems:</p> <p>a. Concealed object detection systems operating in the frequency range from 30 GHz to 3000 GHz, and having a resolution less (better) than 0.1 milliradians at a standoff range of 100 m.</p> <p>b. Specially designed for a military end user.</p>	D
<p>(8) Systems or equipment, incorporating an ultraviolet or infrared (IR) beacon or emitter, specially designed for Combat Identification.</p>	D
<p>(9) Systems that project radiometrically calibrated scenes at a frame rate greater than 30 Hz directly into the entrance aperture of an electro-optical or infrared sensor listed in this table within either the spectral band exceeding 10 nm but not exceeding 400 nm, or the spectral band exceeding 900 nm but not exceeding 30,000 nm.</p>	D
<p>(10) Developmental electro-optical, infrared, or terahertz systems funded by the DoD.</p>	D
<p>(d) Guidance and navigation systems or end items:</p> <p>(1) Guidance or navigation systems (e.g., inertial navigation systems, inertial reference units, attitude and heading reference systems) having any of the following:</p> <p>a. A circular error probability at 50 percent of position error rate less (better) than 0.28 nmi per hour, without the use of positional aiding references.</p> <p>b. A heading error or true north determination of less (better) than 0.28 milliradian secant (latitude) (0.016043 degrees secant (latitude)), without the use of positional aiding references.</p> <p>c. A circular error probability at 50 percent of position error rate less than 0.2 nmi in an 8 hour period, without the use of positional aiding references.</p> <p>d. Meeting or exceeding specified performance at linear acceleration levels exceeding 25g.</p> <p>(2) Global navigation satellite system (GNSS) receiving equipment:</p> <p>a. GNSS receiving equipment specially designed for military applications.</p>	D
	D

**Table 14. Fire Control, Laser, Imaging, and Guidance and Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
b. Global positioning system (GPS) receiving equipment specially designed for encryption or decryption (e.g., YCode, M-Code) of GPS precise positioning service signals.	
c. GNSS receiving equipment specially designed for use with an antenna described in Paragraph (c)(10) of Table 13.	
d. GNSS receiving equipment specially designed for use with rockets, missiles, SLVs, drones, or unmanned air vehicle systems capable of delivering at least a 500 kg payload to a range of at least 300 km.	
(3) GNSS anti-jam systems specially designed for use with an antenna described in Paragraph (c)(10) of Table 13.	D
(4) Mobile relative gravimeters having automatic motion compensation with an in-service accuracy of less (better) than 0.4 milligal.	D
(5) Mobile gravity gradiometers having an accuracy of less (better) than 10 Eotvos squared per radian per second for any component of the gravity gradient tensor, and having a spatial gravity wavelength resolution of 50 m or less.	D
(6) Developmental guidance or navigation systems funded by the DoD.	D
(e) Parts, components, accessories, or attachments:	
(1) Parts and components specially designed for articles described in Paragraph (a)(1) or (a)(5) of this table.	D
(2) Lasers specially designed for articles in Tables 3 to 23.	D
(3) Laser stacked arrays specially designed for articles Tables 3 to 23.	D
(4) Night vision or infrared cameras (e.g., camera core) specially designed for articles in Table 3 to 23.	D
(5) Infrared focal plane arrays specially designed for articles in Tables 3 to 23.	D
(6) Charge multiplication focal plane arrays exceeding 50 milliamperere per watt for any wavelength exceeding 760 nm and specially designed for articles described in Part 1 of this table.	D
(7) Second generation and greater image intensifier tubes specially designed for articles in this table, and specially designed parts and components.	D
(8) Parts and components specially designed for articles described in Paragraph (c)(3), (c)(4), (c)(5) or (c)(6)(vi)-(vii).	D
(9) Inertial measurement units specially designed for articles in Tables 3 to 23.	D
(10) GNSS security devices, e.g., selective availability anti-spoofing modules, security modules, and auxiliary output chips.	D

**Table 14. Fire Control, Laser, Imaging, and Guidance and Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
(11) Accelerometers having a bias repeatability of less (better) than 10 mg and a scale factor repeatability of less (better) than 10 parts per million, or capable of measuring greater than 100,000 g.	D
(12) Gyroscopes or angular rate sensors:	D
a. Having an angle random walk of less (better) than 0.001 degrees per square root hour.	
b. Mechanical gyroscopes or rate sensors having a bias repeatability less (better) than 0.0015 degrees per hour.	
(13) Optical sensors having a spectral filter specially designed for systems or equipment listed in Paragraph (a)(4) of Table 13, or optical sensor assemblies that provide threat warning or tracking for systems or equipment controlled described in Paragraph (a)(4) of Table 13.	D
(14) Infrared focal plane array readout integrated circuits specially designed for articles in Part 1 of this table.	D
(15) Integrated dewar cooler assemblies specially designed for articles in this table, with or without an infrared focal plane array, and specially designed parts and components.	D
(16) Gimbals specially designed for articles listed in this table.	D
(17) Infrared focal plane array Joule-Thomson self-regulating cryostats specially designed for articles described in Tables 3 to 23.	D
(18) Drive, control, signal, or image processing electronics, specially designed for articles described in this table.	D
(19) Near-to-eye displays (e.g., microdisplays) specially designed for articles described in this table.	D
(20) Resonators, receivers, transmitters, modulators, gain media, drive electronics, and frequency converters, specially designed for laser systems described in this table.	D
(21) Two-dimensional infrared scene projector emitter arrays (i.e., resistive arrays) specially designed for infrared scene generators described in Paragraph (a)(10) of Table 13.	D
♦ (22) Any part, component, accessory, attachment, or associated equipment, that:	
a. Is classified.	P
b. Contains classified software.	P
c. Is unclassified but being developed using classified information.	D

**Table 14. Fire Control, Laser, Imaging, and Guidance and Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
(23) Developmental image intensifier tubes, focal plane arrays, read-out integrated circuits, accelerometers, gyroscopes, angular rate sensors, and inertial measurement units funded by the DoD.	D
(f) See Subpart 120.10 of Title 22, CFR for technical data and Subpart 120.9 of Title 22, CFF for defense services directly related to the defense articles described in Paragraphs (a) through (e) of this table and classified technical data directly related to items controlled in ECCNs 7A611, 7B611, and 7D611. See Subpart 125.4 of Title 22, CFR for exemptions.	D
(g) through (w) Reserved.	N/A
(x) Commodities, software, and technology subject to the EAR used in or with defense articles in this table.	D

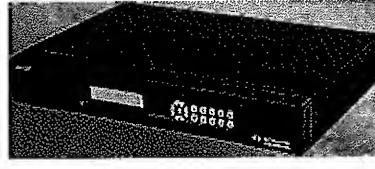
**Part 2. Military items described in the CCL**

ECCN 7A611	Military fire control, laser, imaging, and guidance equipment
(a) Guidance or navigation systems, not elsewhere specified on Part 1 of Tables 3 to 23, that are specially designed for a defense article in Part 1 of Tables 3 to 23 or for a 600 series item described in Part 2 of Tables 3-23.	D
(b) through (w) Reserved.	N/A
(x) Parts, components, accessories, and attachments, including accelerometers, gyros, angular rate sensors, gravity meters (gravimeters), and inertial measurement units, that are specially designed for defense articles described in Part 2 of Tables 3 to 23, and that are not:	Q
(1) Enumerated or controlled in the USML or elsewhere within ECCN 7A611. (2) Described in ECCNs 6A007, 6A107, 7A001, 7A002, 7A003, 7A101, 7A102 or 7A103. (3) Elsewhere specified in Paragraph (y) of ECCN 7A611 or Paragraph (y) of 3A611.	
(y) Reserved.	N/A
ECCN 7B611	Test, inspection, and production equipment and related commodities specially designed for military guidance and control equipment
(a) Test, inspection, and production end items and equipment specially designed for the development, production, repair, overhaul, or refurbishing of commodities described in Part 2 ECCN 7A611 (except Paragraph (y) of ECCN 7A611) of this table or commodities in USML Category XII that are not described in Part 1 of this table or Part 2 of Tables 3 to 23.	Q

**Table 14. Fire Control, Laser, Imaging, and Guidance and Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
(b) Environmental test facilities specially designed for the certification, qualification, or testing of commodities controlled in ECCN 7A611 (except Paragraph (y) of 7A611) or guidance equipment in Part 1 that are not specifically described in Part 1 of this table or Part 2 of Tables 3 to 23.	N/A
(c) Field test equipment specially designed to evaluate or calibrate the operation of systems described in Paragraphs (a), (b), or (c) of Part 1 of this table.	Q
(d) through (w) Reserved.	N/A
(x) Parts, components, accessories, and attachments that are specially designed for a commodity described in this table and that are not described in Part 1 or Part 2 of Tables 3 to 23.	Q

**Table 15. Materials and Miscellaneous Articles**

		
<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
<b>Part 1. Materials and Miscellaneous Articles described in USML Category XIII</b>		
(a) Reserved.		N/A
(b) Information security or cybersecurity systems and equipment, cryptographic devices, software, and components:		
(1) Military or intelligence cryptographic (including key management) systems, equipment assemblies, modules, integrated circuits, components, and software (including their cryptographic interfaces) capable of maintaining secrecy or confidentiality of information or information systems, including equipment and software for tracking, telemetry, and control encryption and decryption.	D	
(2) Military or intelligence cryptographic (including key management) systems, equipment, assemblies, modules, integrated circuits, components, and software (including their cryptographic interfaces) capable of generating spreading or hopping codes for spread spectrum systems or equipment.	D	
(3) Military or intelligence cryptanalytic systems, equipment, assemblies, modules, integrated circuits, components, and software.	D	
(4) Military or intelligence systems, equipment, assemblies, modules, integrated circuits, components, and software (including all previous or derived versions) authorized to control access to or transfer data between different security domains as described on the Unified Cross Domain Management Office Control List.	D	
(5) Ancillary equipment specially designed for the articles in Paragraphs (b)(1)–(4).	C	
(c) Reserved.		N/A
(d) Materials:		
♦ (1) Ablative materials fabricated or semi-fabricated from advanced composites (e.g., silica, graphite, carbon, carbon/carbon, and boron filaments) specially designed for the articles in Table 6 or 17.	D	

**Table 15. Materials and Miscellaneous Articles, Continued**

Description of items for DEMIL coding	DEMIL Code
(2) Carbon/carbon billets and preforms which are reinforced with continuous unidirectional fibers, tows, tapes, or woven cloths in three or more dimensional planes.	D
<p>(e) Armor (e.g., organic, ceramic, metallic) and armor materials:</p> <ul style="list-style-type: none"> <li data-bbox="290 576 1307 661">(1) Spaced armor with electromagnetic (Em) material greater than 1.4 and meeting NIJ 0108.01 type III or higher.</li> <li data-bbox="290 671 1307 787">(2) Transparent armor having Em greater than or equal to 1.3 or having Em less than 1.3 and meeting NIJ Standard 0108.01 type III or higher standards with areal density less than or equal to 40 pounds per square foot.</li> <li data-bbox="290 798 1307 882">(3) Transparent ceramic plate greater than 1/4 inch-thick and larger than 8 inches x 8 inches, excluding glass, for transparent armor.</li> <li data-bbox="290 893 1307 1009">(4) Non-transparent ceramic plate or blanks, greater than 1/4 inches thick and larger than 8 inches x 8 inches for transparent armor. This includes spinel and aluminum oxynitride.</li> <li data-bbox="290 1020 1307 1104">(5) Composite armor with Em greater than 1.4 and meeting NIJ Standard 0108.01 type III or higher.</li> <li data-bbox="290 1115 1307 1199">(6) Metal laminate armor with Em greater than 1.4 and meeting NIJ Standard 0108.01 type III or higher.</li> <li data-bbox="290 1210 1307 1248">(7) Developmental armor funded by the DoD.</li> </ul>	D D D D D D D D
<p>♦ (f) Any article described in this table that:</p> <ul style="list-style-type: none"> <li data-bbox="290 1279 1307 1317">(1) Is classified.</li> <li data-bbox="290 1332 1307 1370">(2) Contains classified software.</li> <li data-bbox="290 1385 1307 1423">(3) Is unclassified but being developed using classified information.</li> </ul>	P P D
<p>♦ (g) Concealment and deception equipment:</p> <ul style="list-style-type: none"> <li data-bbox="290 1469 1307 1617">(1) Polymers loaded with carbonyl iron powder, ferrites, iron whiskers, fibers, flakes, or other magnetic additives having a surface resistivity of less than 5000 Ohms per square and greater than 10 Ohms per square with electrical isotropy of less than 5 percent.</li> <li data-bbox="290 1628 1307 1712">(2) Multi-layer camouflage systems specially designed to reduce detection of platforms or equipment in the infrared or ultraviolet frequency spectrums.</li> <li data-bbox="290 1723 1307 1850">(3) High temperature (greater than 300 degrees Fahrenheit operation) ceramic or magnetic radar absorbing material specially designed for use on defense articles or military items subject to the EAR in accordance with Parts 730-774 of Title 15, CFR.</li> </ul>	D D D

**Table 15. Materials and Miscellaneous Articles, Continued**

Description of items for DEMIL coding	DEMIL Code
(4) Broadband (greater than 30 percent bandwidth) lightweight (less than 2 pounds per square foot) magnetic radar absorbing material specially designed for use on defense articles or military items subject to the EAR in accordance with Parts 730-774 of Title 15, CFR.	D
(h) Energy conversion devices: <ul style="list-style-type: none"> <li data-bbox="300 608 1302 682">(1) Fuel cells specially designed for platforms or soldier systems specified in this table.</li> <li data-bbox="300 699 1302 772">(2) Thermal engines specially designed for platforms or soldier systems specified in this table.</li> <li data-bbox="300 789 1302 825">(3) Thermal batteries.</li> <li data-bbox="300 840 1302 914">(4) Thermionic generators specially designed for platforms or soldier systems in Tables 3 through 23.</li> </ul>	D D F D
♦ (i) Signature reduction software and technical data:	N/A
(j) Equipment, materials, coatings, and treatments not elsewhere specified:	
♦ (k) Tooling and equipment: <ul style="list-style-type: none"> <li data-bbox="300 1072 1302 1146">(1) Tooling and equipment specially designed for production of low observable components.</li> <li data-bbox="300 1163 1302 1273">(2) Portable platform signature field repair validation equipment (e.g., portable optical interrogator that validates integrity of a repair to a signature reduction structure).</li> </ul>	D D
(l) Decals, labels, and technical manuals containing technical data directly related to the items listed in this table described as either:	
<ul style="list-style-type: none"> <li data-bbox="300 1358 1302 1393">(1) Classified or</li> <li data-bbox="300 1410 1302 1453">(2) Unclassified.</li> </ul>	P D
(m) through (w) Reserved.	N/A
<b>Part 2. Military items described in the CCL</b>	
ECCN 0A617	Miscellaneous equipment, materials, and related commodities.
(a) Reserved.	N/A
(b) Concealment and deception equipment specially designed for military application, including special paints, decoys, smoke, or obscuration equipment and simulators, and parts, components, accessories, and attachments specially designed, not described by Part 1.	Q

**Table 15. Materials and Miscellaneous Articles, Continued**

Description of items for DEMIL coding	DEMIL Code
(c) Ferries, bridges (other than those described in Part 1 of Table 9 or in ECCN 0A606 in Part 2 of Table 9), and pontoons specially designed for military use.	Q
(d) Test models specially designed for the development of defense articles described in Tables 6, 8, 9, and 10.	Q
(e) Reserved.	N/A
(f) Metal embrittlement agents.	Q
(g) through (x) Reserved.	N/A
(y) Other commodities: <ul style="list-style-type: none"> <li data-bbox="300 785 1302 899">(1) Specially designed construction equipment for military use, including such equipment specially designed for transport in aircraft described by Paragraph (a), Part 1 of Table 10 or in ECCN 9A610 in Part 2 of Table 10.</li> <li data-bbox="300 908 1302 1022">(2) Specially designed parts, components, accessories, and attachments for commodities in Paragraph (y)(1) of this table, including crew protection kits used as protective cabs.</li> <li data-bbox="300 1030 1302 1102">(3) Specially designed containers, not elsewhere specified, for shipping or packing defense articles or items described in Part 2 of Tables 3 to 23.</li> <li data-bbox="300 1110 1302 1140">(4) Specially designed field generators for military use.</li> <li data-bbox="300 1148 1302 1241">(5) Specially designed power controlled searchlights and control units for military use, and equipment mounting such units.</li> </ul>	A
<b>ECCN 0B617</b>	<b>Test, inspection, and production equipment and related commodities specially designed for the development, production, repair, overhaul, or refurbishing of commodities described in ECCN 0A617.a or USML Category XIII, and parts, components, accessories, and attachments specially designed.</b>
(a) Test, inspection, and production equipment not described by Paragraph (k) of this table, specially designed for the production, development, repair, overhaul, or refurbishing of commodities described in ECCN 0A617 in Part 2 of this table or Part 1 of this table; and parts, components, accessories, and attachments specially designed.	C
(b) Reserved.	N/A
<b>ECCN 0C617</b>	<b>Miscellaneous materials specially designed for military use.</b>
(a) Materials, coatings, and treatments for signature suppression, specially designed for military use to reduce detectability and observability and that are not described in Part 1 or in ECCNs 1C001 in Parts 300 to 799 of Title 15, CFR.	Q
(b) Reserved.	N/A

**Table 15. Materials and Miscellaneous Articles, Continued****INTERPRETATIONS:**

- (a) The following interpretations explain and amplify terms used in this table and elsewhere in Tables 3 through 23:
- (1) Composite armor is defined as having more than one layer of different materials or a matrix.
  - (2) Spaced armors are metallic or nonmetallic armors that incorporate an air space or obliquity or discontinuous material path effects as part of the defeat mechanism.
  - (3) Reactive armor employs explosives, propellants, or other materials between plates for the purpose of enhancing plate motion during a ballistic event or otherwise defeating the penetrator.
  - (4) Electromagnetic armor employs electricity to defeat threats such as shaped charges.
  - (5) Materials used in composite armor could include layers of metals, plastics, elastomers, fibers, glass, ceramics, ceramic-glass reinforced plastic laminates, encapsulated ceramics in a metallic or non-metallic matrix, functionally gradient ceramic-metal materials, or ceramic balls in a cast metal matrix.
  - (6) A material is considered transparent if it allows 75 percent or greater transmission of light in the visible spectrum through a 1 mm thick nominal sample.
  - (7) The material in Part 1 Paragraph (e)(4) has not been treated to reach the 75 percent transmission level referenced in interpretation Paragraph (6).
  - (8) Metal laminate armors are two or more layers of metallic materials which are mechanically or adhesively bonded together to form an armor system.
  - (9) Em is the line-of-sight target mass effectiveness ratio and provides a measure of the tested armor's performance to that of rolled homogenous armor:

$$Em = \frac{\rho_{RHA}(Po - Pr)}{AD_{target}}$$

Where:

rRHA = density of RHA, (7.85 g/cm<sup>3</sup>)

Po = Baseline Penetration of RHA, (mm)

Pr = Residual Line of Sight Penetration, either positive or negative (mm RHA equivalent)

ADTARGET = Line-of-Sight Areal Density of Target (kg/m<sup>2</sup>)

- (10) National Institute of Justice (NIJ) Level III refers to the requirements specified in NIJ standard 0108.01 Ballistic Resistant Protective Materials which identifies types from II-A through IV in the following order of increasing protection:

Type II-A. Lower Velocity 357 Magnum; 9 mm.

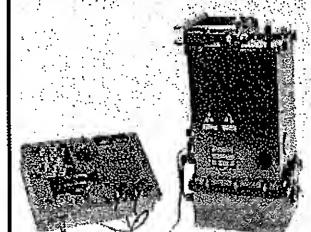
Type II. Higher Velocity 357 Magnum; 9 mm.

Type III-A. 44 Magnum; Submachine Gun 9 mm.

Type III. High-Powered Rifle.

Type IV. Armor-Piercing Rifle.

**Table 16. Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment**

  		DEMIL Code
Description of items for DEMIL coding		
<b>Part 1. Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment described in USML Category XIV</b>		
♦ (a) Chemical agents:		
(1) Nerve agents (see Subpart 121.1 of Title 22, CFR for a complete list).	G	
(2) Amiton (see Subpart 121.1 of Title 22, CFR for a complete list).	G	
(3) Vesicant agents (see Subpart 121.1 of Title 22, CFR for a complete list).	G	
(4) Incapacitating agents (see Subpart 121.1 of Title 22, CFR for a complete list).	G	
(5) Chemical warfare agents not enumerated above adapted for use in war to produce casualties in humans or animals, degrade equipment, or damage crops or the environment. (See the CCL at ECCNs 1C350, 1C355, and 1C395 for control of certain chemicals not adapted for use in war.) (See Subpart 121.1 of Title 22, CFR for a complete list of exclusions).	G	
♦ (b) Biological agents and biologically derived substances and genetic elements thereof (see Subpart 121.1 of Title 22, CFR for a complete list).	G	
♦ (c) Chemical agent binary precursors and key precursors (see Subpart 121.1 of Title 22, CFR for a complete list).	G	
(d) Reserved.	N/A	
(e) Defoliants (see Subpart 121.1 of Title 22, CFR for a complete list).	G	
♦ (f) Parts, components, accessories, attachments, associated equipment, materials, and systems,: (1) Any equipment for the dissemination, dispersion, or testing of items described in Paragraphs (a), (b), (c), or (e): a. Any equipment specially designed for the dissemination and dispersion of items described in Paragraphs (a), (b), (c), or (e) of Table 15.	D	

**Table 16. Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
b. Any equipment specially designed for testing the items described in Paragraphs (a), (b), (c), (e), or (f)(4) developed under a DoD contract or other funding authorization.	D
(2) Any equipment containing reagents, algorithms, coefficients, software, libraries, spectral databases, or alarm set point levels developed under a DoD contract or other funding authorization for the detection, identification, warning, or monitoring of: <ul style="list-style-type: none"> <li data-bbox="342 686 1297 728">a. Items described in Paragraphs (a) or (b).</li> <li data-bbox="342 739 1297 781">b. Chemical or biological agents.</li> </ul>	D
(3) Reserved.	N/A
(4) For individual protection or collective protection against the items described in Paragraphs (a) and (b): <ul style="list-style-type: none"> <li data-bbox="342 918 1297 992">a. M53 Chemical Biological Protective Mask or M50 Joint Service General Purpose Mask.</li> <li data-bbox="342 1003 1297 1045">b. Filter cartridges containing sorbents described in Paragraph (f)(4)(iii).</li> <li data-bbox="342 1056 1297 1129">c. Carbon meeting Military Detail Specification (MIL-DTL)-32101A specifications (e.g., ASZM-TEDA carbon);</li> <li data-bbox="342 1140 1297 1393">d. Ensembles, garments, suits, jackets, pants, boots, or socks for individual protection, and liners for collective protection that allow no more than 1% breakthrough of GD or no more than 2% breakthrough of any other chemical controlled in Paragraph (a) of Part 1 of this table, when evaluated by executing the applicable standard method(s) of testing described in the current version of Test Operating Procedures 08-2-201 or 08-2-501 and using the defined DoD-specific requirements.</li> </ul>	F F F F
(5) Reserved.	N/A
(6) Reserved.	N/A
(7) Chemical Agent Resistant Coatings that have been qualified to Military Specifications MIL-PRF-32348, MIL- DTL-64159, or MIL-C-53039A.	F
(8) Any part, component, accessory, attachment, equipment, or system that: <ul style="list-style-type: none"> <li data-bbox="342 1636 1297 1679">a. Is classified.</li> <li data-bbox="342 1689 1297 1731">b. Is manufactured using classified production data.</li> <li data-bbox="342 1742 1297 1784">c. Is unclassified but being developed using classified information.</li> </ul>	P P D

**Table 16. Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
(g) Antibodies, recombinant protective antigens, polynucleotides, biopolymers, or biocatalysts (including their expression vectors, viruses, plasmids, or cultures of specific cells modified to produce them) (see Subpart 121.1 of Title 22, CFR for a complete list).	F
(h) Vaccines exclusively funded by a DoD contract (see Subpart 121.1 of Title 22, CFR for a complete list).	F
(i) Modeling or simulation tools, including software controlled in Paragraph (m) of Part 1 of this table, for chemical or biological weapons design, development, or employment developed or produced under a DoD contract or other funding authorization.	D
(j) through (l) Reserved.	N/A
(m) Decals, labels, and technical manuals containing technical data directly related to the items listed in this table described as either:  (1) Classified or  (2) Unclassified.	P D
(n) Developmental countermeasures or sorbents funded by the DoD via contract or other funding authorization;	F

**Part 2. Military items described in the CCL**

ECCN 1A607	<b>Military dissemination equipment for riot control agents, military detection, and protection equipment for toxicological agents (including chemical, biological, and riot control agents), and related commodities</b>
(a) through (d) Reserved.	N/A
(e) Equipment specially designed for military use and for the dissemination of any of the riot control agents described in ECCN 1C607, Paragraph (a), Part 2.	Q
(f) Protection equipment (including air conditioning units, protective coatings, and protective clothing):  (1) Not described in Paragraph (f), Part 1 of this table <b>and</b>  (2) Specially designed for military use and for defense against:  a. Materials specified in Paragraphs (a) or (b) of Part 1, <b>or</b>  b. Riot control agents described for ECCN 1C607, Paragraph (a) of Part 2.	Q
(g) Decontamination equipment:  (1) Not described in Paragraph (f).	Q

**Table 16. Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
(2) Specially designed for military use and for decontamination of objects contaminated with materials described in Part 1 Paragraphs (a) or (b).	
(h) Equipment: (1) Not described in Part 1 Paragraph (f), and (2) Specially designed for military use and for the detection or identification of: a. Materials described in Part 1 Paragraphs (a) or (b), or b. Riot control agents described in ECCN 1C607, Paragraph (a).	Q
(i) Reserved.	N/A
(j) Equipment specially designed to: (1) Interface with a detector, shelter, vehicle, vessel, or aircraft described in Tables 3 to 23. (2) Collect and process samples of articles described in Part 1 Paragraphs (a) or (b).	Q
(k) Medical countermeasures that are specially designed for military use (including pre- and post-treatments, antidotes, and medical diagnostics) and specially designed to counter chemical agents described in Part 1 Paragraph (a). Examples are barrier and non-barrier creams and filled autoinjectors (e.g., combopens where one injector contains pralidoxime autoinjector and the other atropine) if specially designed to counter such agents.	Q
(l) through (w) Reserved.	N/A
(x) Parts, components, accessories, and attachments that are specially designed for an item described in ECCN 1A607 Paragraphs (e), (f), (g), or (j) or described in Paragraph (f) of Part 1 and that are not described elsewhere in Part 1 of Tables 3 to 23.	Q
<b>ECCN 1B607</b>	<b>Military test, inspection, and production equipment and related commodities specially designed for the development, production, repair, overhaul, or refurbishing of commodities described in ECCN 1A607 or 1C607, or defense articles enumerated or otherwise described in USML Category XIV</b>
(a) Equipment specially designed for the destruction of the chemical agents described in Part 1 Paragraph (a).	Q
(b) Test facilities and equipment specially designed for military certification, qualification, or testing of commodities described in ECCN 1A607 (e), (f), (g), or (j) or in Part 1 Paragraph (f) (except (f)(1)).	Q

**Table 16. Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment, Continued**

Description of items for DEMIL coding		DEMIL Code
(c) Tooling and equipment specially designed for the development, production, repair, overhaul, or refurbishing of commodities described in ECCN 1A607 (e), (f), (g), (h), or (j) or Part 1 Paragraph (f).		Q
(d) through (w) Reserved.		N/A
(x) Parts, components, accessories, and attachments that are specially designed for a commodity described in ECCN 1B607 Paragraphs (b) or (c), or for a defense article described in Part 1 Paragraph (f), and that are not described elsewhere in Part 1 of Tables 3 to 23.		Q
ECCN 1C607	Tear gases, riot control agents, and materials for the detection and decontamination of chemical warfare agents	
(a) Tear gases and riot control agents with Chemical Abstracts Service (CAS) numbers found on the American Chemical Society website <a href="https://www.cas.org">https://www.cas.org</a> :	(1) Bromobenzyl cyanide, CAS 5798-79-8. (2) o-Chlorobenzylidenemalononitrile or o-Chlorobenzalmalononitrile, CAS 2698-41-1. (3) Phenylacetyl chloride or w-Chloroacetophenone, CAS 532-27-4. (4) Dibenz-(b,f)-1:4-oxazephine, CAS 257-07-8. (5) Adamsite, Diphenylamine chloroarsine, CAS 578-94-9. (6) N-Nonanoylmorpholine, CAS 5299-64-9. (7) Dibromodimethyl ether, CAS 4497-2-4. (8) Dichlorodimethyl ether, CAS 542-88-1. (9) Ethyldibromoarsine, CAS 683-43-2. (10) Bromo acetone, CAS 598-31-2. (11) Bromo methylethylketone, CAS 816-40-0. (12) Iodo acetone, CAS 3019-04-3. (13) Phenylcarbylamine chloride, CAS 622-44-6. (14) Ethyl iodoacetate, CAS 623-48-3.	Q
(b) Biopolymers not described in Part 1 Paragraph (g) specially designed or processed for the detection or identification of chemical warfare agents specified in Part 1 Paragraph (a), and the cultures of specific cells used to produce them.		Q
(c) Biocatalysts and biological systems not described in Part 1 Paragraph (g) specially designed for the decontamination or degradation of chemical warfare agents described in Part 1 Paragraph (a):		Q

**Table 16. Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
(1) Biocatalysts specially designed for the decontamination or degradation of chemical warfare agents described in Part 1 Paragraph (a) resulting from directed laboratory selection or genetic manipulation of biological systems; (2) Biological systems containing the genetic information specific to the production of biocatalysts described in ECCN 1C607, Paragraph (c)(1). a. Expression vectors. b. Viruses. c. Cultures of cells.	
(d) Chemical mixtures not described in Part 1 Paragraph (f) specially designed for military use for the decontamination of objects contaminated with materials specified in Part 1 Paragraphs (a) or (b).	Q

**Table 17. Spacecraft and Related Articles**

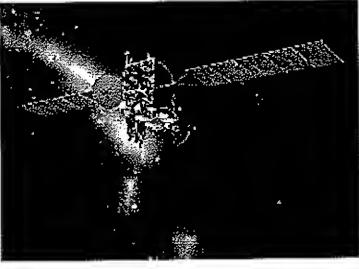
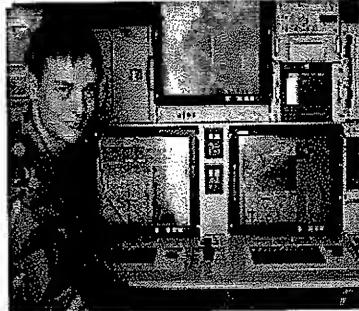
		
<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
<b>Part 1. Spacecraft and Related Articles described in USML Category XV</b>		
(a) Spacecraft, including satellites and space vehicles, whether designated developmental, experimental, research, or scientific, or having a commercial, civil, or military end-use, that:		
◆ (1) Are specially designed to mitigate effects (e.g., scintillation) of or for detection of a nuclear detonation.	D	
◆ (2) Autonomously track ground, airborne, missile, or space objects in real-time using imaging, infrared, radar, or laser systems.	D	
◆ (3) Conduct signals intelligence or measurement and signatures intelligence.	D	
◆ (4) Are specially designed to be used in a constellation or formation that when operated together form a virtual satellite (e.g., functioning as if one satellite) with the characteristics or functions of other items in Paragraph (a).	D	
◆ (5) Are anti-satellite or anti-spacecraft (e.g., kinetic; RF, laser, charged particle).	D	
◆ (6) Have space-to-ground weapons systems (e.g., kinetic or directed energy).	D	
◆ (7) Have any of the following electro-optical remote sensing capabilities or characteristics:		
a. Electro-optical visible and near infrared (VNIR) (i.e., 400 nm to 1,000 nm) or infrared (i.e., greater than 1,000 nm to 30,000 nm) with less than 40 spectral bands and having a clear aperture greater than 0.35 meters.	D	
b. Electro-optical hyperspectral with 40 spectral bands or more in the VNIR, short-wavelength infrared (i.e., greater than 1,000 nm to 2,500 nm) or any combination of the aforementioned and having a GSD less than 30 meters.	D	
c. Electro-optical hyperspectral with 40 spectral bands or more in the mid-wavelength infrared (i.e., greater than 2,500 nm to 5,500 nm) having a narrow spectral bandwidth of (delta lambda (DL)) less than or equal to 20	D	

Table 17. Spacecraft and Related Articles, Continued

Description of items for DEMIL coding	DEMIL Code
nm full width at half maximum (FWHM) or having a wide spectral bandwidth with DI greater than 20 nm FWHM and a GSD less than 200 meters.	
d. Electro-optical hyperspectral with 40 spectral bands or more in the long-wavelength infrared (i.e., greater than 5,500 nm to 30,000 nm) having a narrow spectral bandwidth of limit of the wavelength difference DI less than or equal to 50 nm FWHM or having a wide spectral bandwidth with DI greater than 50 nm FWHM and a GSD less than 500 m.	D
♦ (8) Have radar remote sensing capabilities or characteristics (e.g., active electronically scanned array, synthetic aperture radar, inverse synthetic aperture radar, ultra-wideband synthetic aperture radar), except those having a center frequency equal to or greater than 1 GHz but less than or equal to 10 GHz and having a bandwidth less than 300 MHz.	D
(9) Provide positioning, navigation, and timing signals.	D
(10) Provide space-based logistics, surveillance, assembly, repair, or servicing of any spacecraft (e.g., refueling) and have integrated propulsion other than that required for attitude control.	D
(11) Provide for sub-orbital or in-space human habitation and have integrated propulsion other than that required for attitude control.	D
(12) That are not commercial communications satellites and that have integrated propulsion other than for attitude control or achieving initial orbit.	D
♦ (13) Are classified, contain classified software or hardware, are manufactured using classified production data, or are being developed using classified information (e.g., having classified requirements, specifications, functions, or operational characteristics or include classified cryptographic items described under Part 1 of Table 15).	P
(b) Ground control systems or training simulators, specially designed for tracking, telemetry, and control of spacecraft in Paragraph (a).	C
(c) Reserved.	N/A
(d) Reserved.	N/A
(e) Spacecraft parts, components, accessories, attachments, equipment, or systems: (1) Antenna systems specially designed for spacecraft that: a. Have a dimension greater than 25 meters in diameter or length of the major axis. b. Employ active electronic scanning. c. Are adaptive beam forming. d. Are for interferometric radar.	D

Table 17. Spacecraft and Related Articles, Continued

Description of items for DEMIL coding	DEMIL Code
(2) Space-qualified optics (i.e., lens or mirror), including optical coating, having active properties (e.g., adaptive, deformable) with a largest lateral clear aperture dimension greater than 0.35 meters.	D
(3) Space-qualified focal plane arrays having a peak response in the wavelength range exceeding 900 nm and readout integrated circuit, whether separate or integrated, specially designed.	D
(4) Space-qualified mechanical (i.e., active) cryocooler or active cold finger, and associated control electronics specially designed.	D
(5) Space-qualified active vibration suppression, including active isolation and active dampening, and associated control electronics.	D
(6) Optical bench assemblies specially designed to enable spacecraft to meet or exceed the parameters described in Paragraph (a).	D
(7) Space-qualified kinetic or directed-energy systems (e.g., RF, laser, charged particle) specially designed for spacecraft in Paragraph (a)(5) or (a)(6), and specially designed parts and components (e.g., power conditioning and beam-handling or switching, propagation, tracking, and pointing equipment).	D
(8) Reserved.	N/A
(9) Space-qualified cesium, rubidium, hydrogen maser, or quantum (e.g., based upon aluminum, mercury, ytterbium, strontium, beryllium ions) atomic clocks, and specially designed parts and components.	D
(10) Attitude determination and control systems, and specially designed parts and components, that provide a spacecraft's geolocation accuracy, without using ground location points, better than or equal to:	
a. 5 meters circular error at 90 percent confidence (CE90) from low earth orbit;	D
b. 30 meters CE90 from medium earth orbit;	D
c. 150 meters CE90 from geosynchronous orbit; or	D
d. 225 meters CE90 from high earth orbit.	D
(11) Space-based systems, and specially designed parts and components:	
a. Nuclear reactors and associated power conversion systems (e.g., liquid metal or gas-cooled fast reactors);	D
b. Radioisotope-based power systems (e.g., radioisotope thermoelectric generators); or	D
c. Nuclear thermal propulsion systems (e.g., solid core, liquid core, gas core fission).	D
(12) Thrusters (e.g., rocket engines) that provide greater than 150 lbf (e.g., 667.23 N) vacuum thrust.	G
(13) Control moment gyroscope specially designed for spacecraft.	D

**Table 17. Spacecraft and Related Articles, Continued**

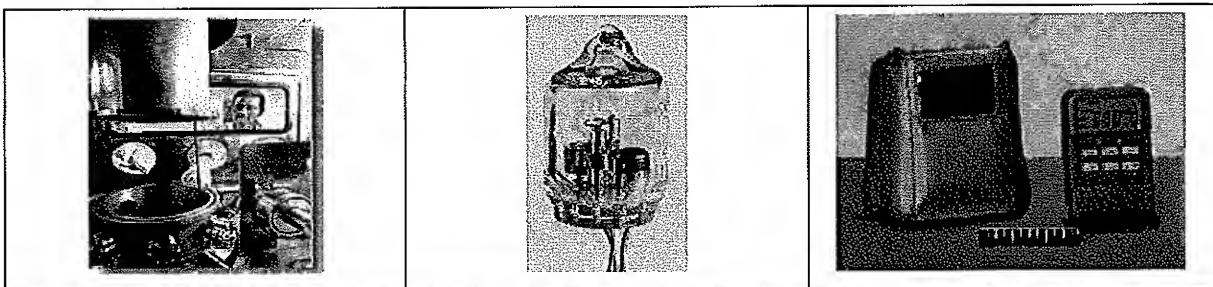
Description of items for DEMIL coding	DEMIL Code
(14) Space-qualified monolithic MMIC that combine transmit and receive functions on a single die:	
a. Having a power amplifier with maximum saturated peak output power ( $P_{sat}$ ), in watts, greater than 200 divided by the maximum operating frequency (in GHz) squared [ $P_{sat} > 200 \text{ W} * \text{GHz}^2 / f\text{GHz}^2$ ]; or	D
b. Having a common path (e.g., phase shifter-digital attenuator) circuit with greater than 3 bits phase shifting at operating frequencies 10 GHz or below, or greater than 4 bits phase shifting at operating frequencies above 10 GHz.	D
(15) Space-qualified oscillator for radar in Paragraph (a) with phase noise less than $-120 \text{ dBc/ Hz} + (20 \log_{10}(\text{RF}) \text{ (in GHz)})$ measured at 2 KHz*RF (in GHz) from carrier.	D
(16) Space-qualified star tracker or star sensor with angular accuracy less than or equal to 1 arcsecond (1-Sigma) per star coordinate, and a tracking rate equal to or greater than 3.0 degrees per second, and specially designed parts and components.	D
(17) Primary, secondary, or hosted payload that performs any of the functions described in Paragraph (a):	
♦ (18) Secondary or hosted payload, and specially designed parts and components, developed with DoD funding.	D
(19) Spacecraft heat shields or heat sinks specially designed for atmospheric entry or re-entry, and specially designed parts and components.	D
(20) Equipment modules, stages, or compartments that contain propulsion other than that required for attitude control and can be separated or jettisoned from another spacecraft.	D
♦ (21) Any part, component, accessory, attachment, equipment, or system that: <ul style="list-style-type: none"> <li>a. Is classified.</li> <li>b. Contains classified software.</li> <li>c. Is unclassified but being developed using classified information.</li> </ul>	P P D
(f) Decals, labels, and technical manuals containing technical data directly related to the items listed in this table described as either: <ul style="list-style-type: none"> <li>(1) Classified or</li> <li>(2) Unclassified.</li> </ul>	P D
(g) through (w) Reserved.	N/A

Table 17. Spacecraft and Related Articles, Continued

Description of items for DEMIL coding		DEMIL Code
Part 2. Military items described in the CCL		
ECCN 9A515	Spacecraft and Related Commodities	
(a) Spacecraft, including satellites, and space vehicles, whether designated developmental, experimental, research, or scientific, not described in Part 1 of this table or in ECCN 9A004 in Part 774 of Title 15, CFR.		Q
(b) Ground control systems and training simulators specially designed for telemetry, tracking, and control of the spacecraft described in ECCN 9A515 in Paragraph (a), Part 2 of this table.		Q
(c) Reserved.		N/A
(d) Microelectronic circuits (e.g., integrated circuits, microcircuits, metal oxide semi-conductor field-effect transistors) and discrete electronic components rated, certified, or otherwise specified or described as meeting or exceeding all the following characteristics and that are specially designed for items described in Tables 3 through 23 or ECCN 9A515 described in Part 2 of this table:	D	
(1) A total dose of $5 \times 10^5$ Radians (Rads) (System of units (Si)) ( $5 \times 10^3$ gray (Gy) (Si));		
(2) A dose rate upset threshold of $5 \times 10^8$ Rads (Si)/sec ( $5 \times 10^6$ Gy (Si)/sec);		
(3) A neutron dose of $1 \times 10^{14}$ n/cm <sup>2</sup> (1 million electron volts (MeV) equivalent);		
(4) An uncorrected single event upset sensitivity of $1 \times 10^{-10}$ errors/bit/day or less, for the cosmic ray effects on micro-electronics-Monte Carlo geosynchronous orbit, solar minimum environment for heavy ion flux. An uncorrected single event upset sensitivity of $1 \times 10^{-3}$ errors/part or less for a fluence of $1 \times 10^7$ protons/cm <sup>2</sup> for proton energy greater than 50 MeV; and		
(5) An uncorrected single event upset sensitivity of $1 \times 10^{-3}$ errors/part or less for a fluence of $1 \times 10^7$ protons/cm <sup>2</sup> for proton energy greater than 50 MeV.		
(e) Microelectronic circuits (e.g., integrated circuits and micro-circuits) that are rated, certified, or otherwise specified or described as meeting or exceeding all the following characteristics and that are specially designed for items described in Part 1 or ECCN 9A515 in Part 2 of this table:	D	
(1) A total dose $\geq 1 \times 10^5$ Rads (Si) ( $1 \times 10^3$ Gy(Si)) and $< 5 \times 10^5$ Rads (Si) ( $5 \times 10^3$ Gy(Si)); and		
(2) A single event effect (i.e., single event latchup, single event burnout, or single event gate rupture) immunity to a linear energy transfer $\geq 80$ MeV-cm <sup>2</sup> /mg.		

**Table 17. Spacecraft and Related Articles, Continued**

<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
(f) Pressure suits (i.e., space suits) capable of operating at altitudes 55,000 feet above sea level.		Q
(g) through (w) Reserved.		N/A
(x) Specially designed parts, components, accessories, and attachments for an item in ECCN 9A515 or Part 1 of this table and that are not described in other ECCNs and are not microelectronic circuits and discrete electronic components.		Q
(y) Items identified in an interagency-cleared commodity classification pursuant to Section 748.3 (e) of Title 15, CFR.		Q
(1) Discrete electronic components not specified in Paragraph (e).		Q
(2) Reserved.		N/A
<b>ECCN 9B515</b>	<b>Test, inspection, and production equipment specially designed for spacecraft and related commodities.</b>	
(a) Test, inspection, and production equipment specially designed for the production or development of Paragraph (a), ECCN 9A515 items described in Part 2 or Paragraphs (a) and (e) of Part 1 of this table.		C
(b) Environmental test chambers capable of pressures below (10-4) Torr, and specially designed for Paragraph (a), ECCN 9A515 items described in Part 2 or Paragraph (a) of Part 1.		Q
<b>INTERPRETATIONS:</b> In Part 1 Paragraph (e)(17), primary payload is that complement of equipment designed from the outset to accomplish the prime mission function of the spacecraft payload mission set. The primary payload may operate independently from the secondary payload(s). Secondary payload is that complement of equipment designed from the outset to be fully integrated into the spacecraft payload mission set. The secondary payload may operate separately from the primary payload. Hosted payload is a complement of equipment or sensors that uses the available or excess capacity (e.g., mass, volume, or power) of a spacecraft to accommodate an additional, independent mission. The hosted payload may share the spacecraft bus support infrastructure. The hosted payload performs an additional, independent mission which does not dictate control or operation of the spacecraft. A hosted payload is not capable of operating as an independent spacecraft. Spacecraft bus (distinct from the spacecraft payload), provides the support infrastructure of the spacecraft (e.g., command and data handling, communications and antenna(s), electrical power, propulsion, thermal control, attitude and orbit control, guidance, navigation and control, structure and truss, life support (for crewed mission)) and location (e.g., attachment, interface) for the spacecraft payload. Spacecraft payload is that complement of equipment attached to the spacecraft bus that performs a particular mission in space (e.g., communications, observation, science).		
Paragraph (a), ECCN 9A515 of Part 2, includes commercial communications satellites, remote sensing satellites planetary rovers, planetary and interplanetary probes, and in-space habitats not described in Part 1.		

**Table 18. Nuclear Weapons Related Articles**


<b>Part 1. Nuclear Weapons Related Articles described in USML Category XVI -</b>	
<b>Description of items for DEMIL coding</b>	<b>DEMIL Code</b>
(a) Reserved.	N/A
♦ (b) Modeling or simulation tools that model or simulate the environments generated by nuclear detonations or the effects of these environments on systems, subsystems, components, structures, or humans.	D
(c) Reserved.	N/A
(d) Parts, components, accessories, attachments, associated equipment, and production, testing, and inspection equipment and tooling, specially designed for the articles in Paragraph (b).	D
(e) Decals, labels, and technical manuals containing technical data directly related to the items listed in Paragraph (b) described as either: (1) Classified or (2) Unclassified.	P D
(f) through (w) Reserved.	N/A

**Table 19. Classified Articles, Technical Data, and Defense Services Not Otherwise Listed**

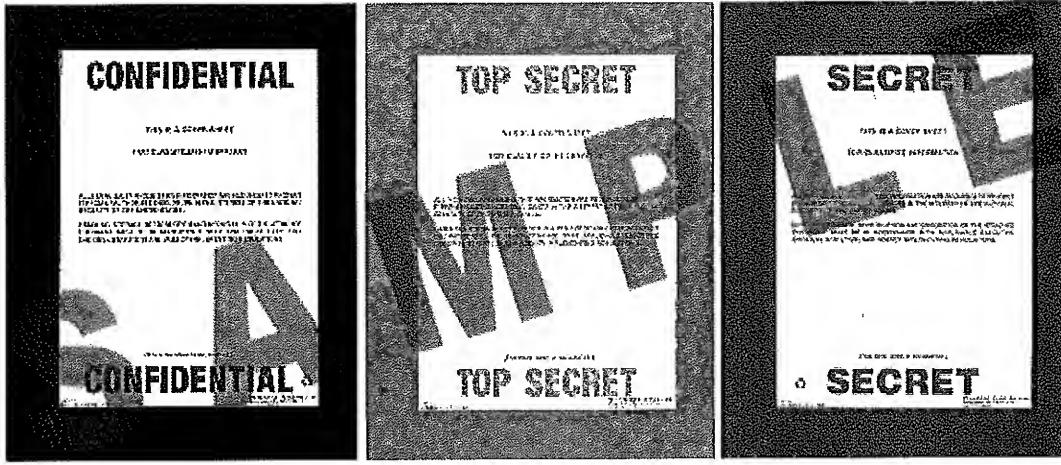
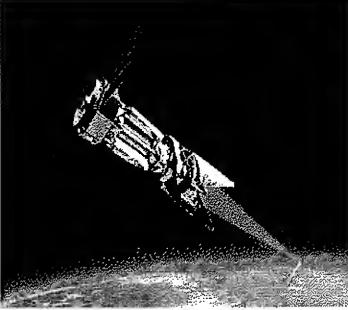
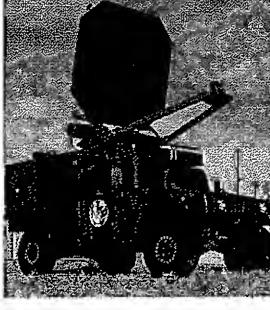
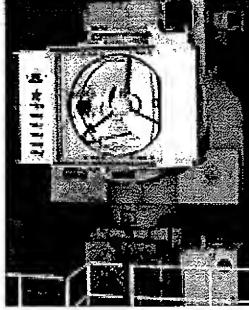
	
<b>Part 1. Classified Articles, Technical Data, and Defense Services Not Otherwise Enumerated as described in USML Category XVII</b>	
Description of items for DEMIL coding	DEMIL Code
♦ (a) All articles, and technical data (as defined in Subpart 120.10 of Title 22, CFR) and defense services as defined in Part 120.9 of Title 22, CFR which are classified in the interests of national security and that are not otherwise described on the USML.	P

Table 20. Directed Energy Weapons

		
<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
<b>Part 1. Directed Energy Weapons described in USML Category XVIII</b>		
♦ (a) Directed energy weapons:		D
(1) Systems or equipment that, other than as a result of incidental, accidental, or collateral effect:		
a. Degrade, destroy, or cause mission-abort of a target;		
b. Disturb, disable, or damage electronic circuitry, sensors, or explosive devices remotely;		
c. Deny area access;		
d. Cause lethal effects; or		
e. Cause ocular disruption or blindness; <b>and</b>		
(2) Use any non-acoustic technique such as lasers (including continuous wave or pulsed lasers), particle beams, particle accelerators that project a charged or neutral particle beam, high power radio-frequency (RF), or high pulsed power or high average power RF beam transmitters.		
♦ (b) Systems or equipment specially designed to detect, identify, or provide defense against articles specified in Paragraph (a) of Part 1 of this table.		D
(c) Reserved.		N/A
(d) Reserved.		N/A
(e) Components, parts, accessories, attachments, and associated systems or equipment specially designed for any of the defense articles in Paragraphs (a) and (b).		D
(f) Developmental directed energy weapons funded by the DoD via contract or other funding authorization, and specially designed parts and components.		D
(g) Decals, labels, and technical manuals containing technical data directly related to the items listed in this table described as either:		

**Table 20. Directed Energy Weapons, Continued**

<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
(1) Classified or (2) Unclassified.		P D
<b>Part 2. Military items described in the CCL</b>		
ECCN 6B619	<b>Test, inspection, and production equipment and related commodities specially designed for the development, production, repair, overhaul, or refurbishing of commodities enumerated or otherwise described in USML Category XVIII</b>	
(a) Tooling, templates, jigs, mandrels, molds, dies, fixtures, alignment mechanisms, and test equipment not enumerated or otherwise described in this table and not elsewhere specified that are specially designed for the development, production, repair, overhaul, or refurbishing of commodities described in Part 1 of this table.		D
(b) through (w) Reserved.		N/A
(x) Parts, components, accessories, and attachments specially designed for an item described in Paragraph (a) of this ECCN.		Q

**Table 21. Gas Turbine Engines and Associated Equipment**


<b>Part 1. Gas Turbine Engines and Associated Equipment described in USML Category XIX</b>	
<b>Description of items for DEMIL coding</b>	<b>DEMIL Code</b>
♦ (a) Turbofan and turbojet engines (including technology demonstrators, developmental engines, or variable cycle engines), capable of 15,000 lbf (66.7 kilonewton) of thrust or greater that have any of the following:	
(1) With or specially designed for thrust augmentation (afterburner).	C
(2) Thrust or exhaust nozzle vectoring.	C
(3) Parts or components described in Paragraph (f)(6).	P
(4) Specially designed for sustained 30 second inverted flight or negative g maneuver.	C
(5) Specially designed for high power extraction (greater than 50 percent of engine thrust at altitude) at altitudes greater than 50,000 feet.	C
♦ (b) Turboshaft and turboprop engines (including technology demonstrators or developmental engines):	
(1) Capable of 1500 mechanical shaft horsepower (1119 kW) or greater and specially designed with oil sump sealing when the engine is in the vertical position.	C
(2) Capable of 225 specific power or greater and specially designed for armament gas ingestion and transient maneuvers, where specific power is defined as maximum takeoff shaft horsepower divided by compressor inlet flow (lbm/sec).	C
♦ (c) Gas turbine engines (including technology demonstrators, developmental engines, and variable cycle engines) specially designed for UAV systems, cruise missiles, or target drones.	C
♦ (d) GE38, AGT1500, CTS800, MT7, T55, TF60, HPW3000, GE3000, T408, and T700 engines.	C
♦ (e) Digital engine controls (e.g., full authority digital engine controls and digital electronic engine controls) specially designed for gas turbine engines described in this table.	D

**Table 21. Gas Turbine Engines and Associated Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
(f) Parts, components, accessories, attachments, associated equipment, and systems:	
(1) Parts, components, accessories, attachments, and equipment specially designed for the following U.S. origin engines and military variants: F101, F107, F112, F118, F119, F120, F135, F136, F414, F415, and J402 and not common to other engines.	D
♦ (2) Hot section components (i.e., combustion chambers and liners, high pressure turbine blades, vanes, disks and related cooled structure; cooled low pressure turbine blades, vanes, disks and related cooled structure; cooled augmenters; and cooled nozzles) specially designed for gas turbine engines described in this table.	D
(3) Uncooled turbine blades, vanes, disks, and tip shrouds specially designed for gas turbine engines described in this table.	D
(4) Combustor cowls, diffusers, domes, and shells specially designed for gas turbine engines described in this table.	D
(5) Engine monitoring systems (i.e., prognostics, diagnostics, and health) specially designed for gas turbine engines and components described in this table.	C
♦ (6) Any part, component, accessory, attachment, equipment, or system that: <ul style="list-style-type: none"> <li>a. Is classified.</li> <li>b. Contains classified software.</li> <li>c. Is unclassified but being developed using classified information.</li> </ul>	P P D
(7) Test cells or test stands specially designed for technology demonstrator engines, developmental engines, or variable cycle engines described in this table.	D
(8) Investment casting cores, core dies, or wax pattern dies for parts or components enumerated in Paragraphs (f)(1), (f)(2), or (f)(3).	D
(9) Pressure gain combustors specially designed for engines controlled in this table and specially designed parts and components.	D
(10) Three-stream fan systems that allow the movement of airflow between the streams to control fan pressure ratio or bypass ratio (by means other than use of fan corrected speed or the primary nozzle area to change the fan pressure ratio or bypass ratio), and specially designed parts, components, accessories, and attachments.	D
(11) High pressure compressors with core-driven bypass streams that have a pressure ratio greater than one, occurring across any section of the bypass	D

**Table 21. Gas Turbine Engines and Associated Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
duct, and specially designed parts, components, accessories, and attachments.	D
(12) Intermediate compressors of a three-spool compression system with an intermediate spool-driven bypass stream that has a pressure ratio greater than one, occurring across any section of the bypass duct, and specially designed parts, components, accessories, and attachments.	D
(13) Powders specially designed for thermal or environmental barrier coating of defense articles enumerated in Paragraphs (f)(1) to (f)(4).	D
(14) Superalloys (i.e., nickel, cobalt or iron based), used in directionally solidified or single crystal casting, specially designed for items described in Paragraphs (f)(1) to (f)(4).	D
(15) Imide matrix, metal matrix, or ceramic matrix composite material (i.e., reinforcing fiber combined with a matrix) specially designed for items described in Paragraphs (f)(1) to (f)(4).	D
(16) If specially designed for an item in Paragraph (f)(1): <ol data-bbox="344 994 1269 1058" style="list-style-type: none"> <li>Jigs, locating fixtures, templates, gauges, molds, dies, or caul plates, for production of engine parts and components; or</li> <li>Test cells or test stands.</li> </ol>	D D
(g) Decals, labels, and technical manuals containing technical data directly related to the items listed in this table described as either: <ol data-bbox="295 1205 1269 1290" style="list-style-type: none"> <li>Classified or</li> <li>Unclassified.</li> </ol>	P D
(h) through (w) Reserved.	N/A

**Part 2. Military items described in the CCL**

ECCN 9A619	Military gas turbine engines and related commodities.
(a) Military gas turbine engines specially designed for a military use that are not described in Paragraphs (a), (b), (c), or (d), Part 1 of this table. For purposes of this paragraph, the term military gas turbine engines means gas turbine engines specially designed for end items listed in Part 1 of Tables 8, 9, or 10, or on the CCL under Part 2 ECCNs 0A606, 8A609, or 9A610.	C
(b) Digital engine controls (e.g., full authority digital engine controls and digital electronic engine controls) specially designed in ECCN 9A619 gas turbine engines described in Part 2.	D
(c) If specially designed for gas turbine engines described in ECCN 9A619, Paragraph (a), Part 2 hot section components (i.e., combustion chambers and	D

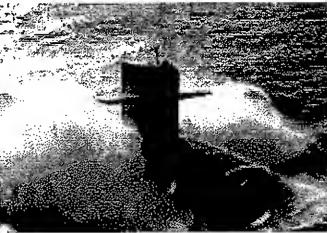
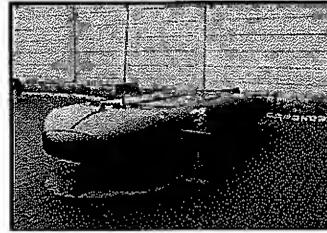
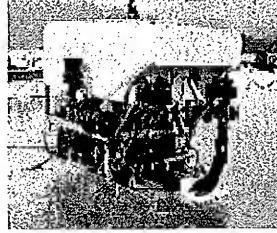
**Table 21. Gas Turbine Engines and Associated Equipment, Continued**

Description of items for DEMIL coding	DEMIL Code
liners; high pressure turbine blades, vanes, disks and related cooled structure; cooled low pressure turbine blades, vanes, disks and related cooled structure; cooled augmenters; and cooled nozzles).	
(d) If specially designed for gas turbine engines described in ECCN 9A619, Paragraph (a), Part 2, uncooled turbine blades, vanes, disks, and tip shrouds.	D
(e) If specially designed for gas turbine engines described in Paragraph (a), ECCN 9A619, Part 2, combustor cowls, diffusers, domes, and shells.	D
(f) Engine monitoring systems (i.e., those that conduct prognostics, diagnostics, and monitor health) specially designed for gas turbine engines and components described in ECCN 9A619, Part 2.	C
(g) through (w) Reserved.	N/A
(x) Specially designed parts, components, accessories and attachments that are for an item described in ECCN 9A619, Paragraph (c), Part 2 or a defense article in Part 1 and not described in Paragraph (y), Part 2.	Q
(y) Specific parts, components, accessories, and attachments specially designed for an item in this table or in Table 10, Part 2, ECCN 9A610: <ul style="list-style-type: none"> <li>(1) Oil tank and reservoirs.</li> <li>(2) Oil lines and tubes.</li> <li>(3) Fluid hoses, straight and unbent lines, fittings, couplings, clamps, and brackets.</li> <li>(4) Fluid filters and filter assemblies.</li> <li>(5) Check valves for hydraulic and pneumatic systems.</li> <li>(6) Shims.</li> <li>(7) Identification plates.</li> <li>(8) Fluid manifolds.</li> </ul>	A A A A A A A A
ECCN 9B619	<b>Test, inspection, and production equipment and related commodities specially designed for the development or production of commodities listed in ECCN 9A619 or USML Category XIX.</b>
(a) Test, inspection, and production equipment specially designed for the production, development, repair, overhaul, or refurbishment of commodities described in ECCN 9A619 in Part 2 or Part 1, and parts, components, accessories, and attachments specially designed.	C
(b) Equipment, cells, or stands specially designed for testing, analysis, and fault isolation of engines, systems, components, parts, accessories, and attachments specified as ECCN 9A619 in Part 2 or in Part 1.	C

**Table 21. Gas Turbine Engines and Associated Equipment, Continued**

<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
(c) through (x) Reserved.		N/A
ECCN 9C619	<b>Materials specially designed for commodities described in 9A619 not elsewhere specified in the CCL or the USML.</b>	
(a) Reserved.	Materials not elsewhere specified in the Tables 3 through 23 or the CCL and specially designed for items described in Part 1 or ECCN 9A619 of Part 2 of this table. Includes materials specially designed for both an engine described in Part 1 of this table and an engine described in ECCN 9A619 in Part 2 of this table.	Q
(b) Reserved.		N/A
<b>INTERPRETATIONS:</b> Note to Paragraph (f)(1), Part 1: Specially designed does not control parts, components, accessories, and attachments that are common to engines described in Paragraph (a) through (d), Part 1 but not described in Paragraph (f)(1) of Part 1. For example, a part common to only the F110 and F136 is not specially designed for purposes of Paragraph (f)(1). A part common to only the F119 and F135, two engine models described in Paragraph (f)(1), Part 1, is specially designed.		

**Table 22. Submersible Vessels and Related Articles**

			
<b>Description of items for DEMIL coding</b>			<b>DEMIL Code</b>
<b>Part 1. Submersible Vessels and Related Articles described in USML Category XX</b>			
(a) Submersible and semi-submersible vessels that are:			
♦ (1) Submarines specially designed for military use.			C
(2) Mine countermeasure vehicles.			C
(3) Anti-submarine warfare vehicles.			C
(4) Armed or are specially designed to be used as a platform to deliver munitions or otherwise destroy or incapacitate targets (e.g., firing torpedoes, launching rockets, firing missiles, deploying mines, deploying countermeasures) or deploy military payloads.			C
(5) Swimmer delivery vehicles specially designed for the deployment, recovery, or support of swimmers or divers from submarines.			C
(6) Integrated with nuclear propulsion systems.			C
(7) Equipped with any mission systems in Tables 3 through 23.			C
(8) Developmental vessels funded by the DoD via contract or other funding authorization.			C
♦ (b) Engines, electric motors, and propulsion plants:			
(1) Naval nuclear propulsion plants, their land prototypes, and special facilities for their construction, support, and maintenance.			F
(2) Electric motors specially designed for submarines that have the following:			D
a. Power output of more than 0.75 megawatts (1,000 horsepower);			
b. Quick reversing;			
c. Liquid cooled; and			
d. Totally enclosed.			
(c) Parts, components, accessories, attachments, and associated equipment, including production, testing, and inspection equipment and tooling, specially designed or modified for any of the articles in Paragraphs (a) and (b).			D

**Table 22. Submersible Vessels and Related Articles, Continued**

<b>Description of items for DEMIL coding</b>		<b>DEMIL Code</b>
(d) Decals, labels, and technical manuals containing technical data directly related to the items listed in this table described as either:		
(1) Classified or		P
(2) Unclassified.		D
(e) through (w) Reserved.		N/A
<b>Part 2. Military items described in the CCL</b>		
<b>ECCN 8A620</b>	<b>Submersible vessels, oceanographic, and associated commodities.</b>	
(a) Submersible and semi-submersible vessels specially designed for a military use and not described in the Tables 3 through 23. This paragraph includes submarine rescue vehicles and deep submergence vehicles.		C
(b) Submersible and semi-submersible vessels specially designed for cargo transport and parts, components, accessories, and attachments specially designed.		C
(c) Harbor entrance detection devices (magnetic, pressure, and acoustic) and controls, not elsewhere specified in Tables 3 to 23.		C
(d) Diesel engines of 1,500 horsepower and over with rotary speed of 700 rpm or over specially designed for submarines.		D
(e) Submarine nets and torpedo nets.		D
(f) Closed and semi-closed circuit (rebreathing) apparatus specially designed for military use and not described elsewhere in the CCL or in the USML, and specially designed components for use in the conversion of open-circuit apparatus to military use.		D
(g) through (w) Reserved.		N/A
(x) Specially designed parts, components, accessories, and attachments for an ECCN 8A620 item described in Part 2 (except for Paragraph (b) of Part 2) or in Part 1 that is not elsewhere specified and not described in Paragraph (y), Part 2 of Table 22.		Q
(y) Specific parts, components, accessories, and attachments specially designed for an item described in Part 2 of this table:		
(1) Public address systems		A
(2) Filters and filter assemblies, hoses, lines, fittings, couplings, and brackets for pneumatic, hydraulic, oil and fuel systems.		A
(3) Galleys.		A

**Table 22. Submersible Vessels and Related Articles, Continued**

Description of items for DEMIL coding	DEMIL Code
(4) Lavatories.	A
(5) Magnetic compass, magnetic azimuth detector.	A
(6) Medical facilities.	A
(7) Potable water tanks, filters, valves, hoses, lines, fittings, couplings, and brackets.	A
(8) Panel knobs, indicators, switches, buttons, and dials whether unfiltered or filtered for use with night vision imaging systems.	A
(9) Emergency lighting.	A
(10) Gauges and indicators.	A
(11) Audio selector panels.	A
<b>ECCN 8B620</b>	<b>Test, inspection, and production equipment and related commodities specially designed for the development, production, repair, overhaul, or refurbishing of commodities listed in ECCN 8A620.</b>
(a) Test, inspection, and production equipment specially designed for the development, production, repair, overhaul, or refurbishing of commodities described in ECCN 8A620 (except for Paragraphs (b) and (y)) in Part 2 and parts, components, accessories, and attachments specially designed.	C
(b) Test, inspection, and production equipment specially designed for the development, production, repair, overhaul, or refurbishing of commodities described in ECCN 8A620 in Paragraph (b), Part 2 and parts, components, accessories, and attachments specially designed.	C

**Table 23. Articles, Technical Data, and Defense Services Not Otherwise Listed**

<b>Articles, Technical Data, and Defense Services Not Otherwise Enumerated as described in USML Category XXI</b>	
<b>Description of items for DEMIL coding</b>	<b>DEMIL Code</b>
♦ (a) Any article not described on the USML may be included in this table until such time as the appropriate USML category is amended. The decision on whether any article may be included in this table, and the designation of the defense article as not significant military equipment in accordance with Part 120.7 of Title 22, CFR is made by the Director, Office of Defense Trade Controls Policy.	D
(b) Technical data in accordance with Subpart 120.10 of Title 22, CFR and defense services in accordance with Subpart 120.9 of Title 22, CFR directly related to the defense articles described in Paragraph (a) of this table.	D

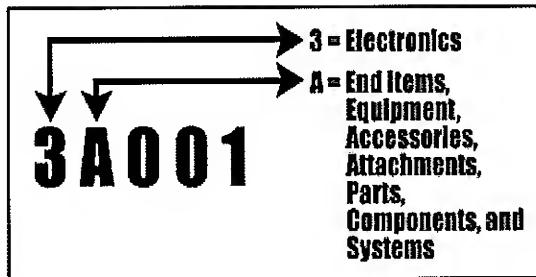
## SECTION 4: DEMIL CODING OF CCL ITEMS

### 4.1. ASSIGNING DEMIL CODES TO NON-MILITARY CCL ITEMS.

a. **Introduction.** DEMIL coders will use this section with Step 12 of the coding steps described in Table 2 in accordance with Part 774 of Title 15, CFR. Items not described in the USML or CCL become eligible for DEMIL code "A" assignment.

b. **ECCNs.** The key in determining whether an item meets DEMIL code "Q" criteria is whether the item is listed on the CCL and is described under a specific ECCN as stated in Part 774 of Title 15, CFR. An example ECCN is shown in Figure 2. Each ECCN consists of 5 characters as shown in Figure 2.

**Figure 2. Example of an ECCN**



(1) The first position in an ECCN is a number which identifies the CCL category as listed in Table 24.

**Table 24. CCL Categories**

Category 0	Nuclear Materials, Facilities, and Equipment and Miscellaneous Items
Category 1	Materials, Chemicals, Microorganisms, and Toxins
Category 2	Materials Processing
Category 3	Electronics
Category 4	Computers
Category 5	Telecommunications (Part I) and Information Security (Part II)
Category 6	Sensors and Lasers
Category 7	Navigation and Avionics
Category 8	Marine
Category 9	Aerospace and Propulsion

(2) The second position is a letter to identify the CCL product group as shown in Table 25.

**Table 25. CCL Product Groups**

Group A	End Items, Equipment, Accessories, Attachments, Parts, Components, and Systems
Group B	Test, Inspection, and Production Equipment
Group C	Materials
Group D	Software
Group E	Technology

(3) The third position is a number which identifies the CCL primary reason (or reasons) for control contained in the entry as shown in Table 26.

**Table 26. CCL Primary Reason (or Reasons) for Control**

3 <sup>rd</sup> Digit	Reason(s) for Control
0	National Security
1	Missile Technology
2	Nuclear Nonproliferation
3	Chemical and Biological Weapons
5	National Security (Spacecraft)*
6	National Security (Military Related)*
9	Anti-Terrorism; Crime Control; Encryption Items; Firearms Convention; Regional Stability; Short Supply; United Nations Embargo; Significant Items; Surreptitious Listening

\*ECCNs that are 600 Series or 9x515 items, for the purposes of DEMIL coding, are listed in Part 2 of selected Tables 3 to 23. This section specifically addresses items that are not 600 series or 9x515 items.

**c. Control Under the EAR.** The EAR controls specific items found on the CCL based on objective technical characteristics as well as other items based on a series of general criteria in accordance with Parts 730-774 of Title 15, CFR. All such items are considered subject to the EAR.

(1) To classify an item subject to the EAR against the CCL, review the general characteristics of the item. This will usually guide you to the appropriate category described in Table 24.

(2) Once a potentially applicable CCL category is described, determine which product group described in Table 25 within the CCL category applies to the item. If the third digit is a 5 or 6, go back to step 2 of Table 2.

(3) Then start from the beginning of the product group and examine each ECCN to determine whether a specific ECCN describes the item.

**d. Finding an ECCN.**

(1) To narrow the search within the CCL category and group, each ECCN will have a heading with a brief description as shown in Figure 3.

**Figure 3. Example of an ECCN Heading**

**3A001 Electronic components and “specially designed components” therefor, as follows (see List of Items Controlled).**

(2) After the brief description for each ECCN in the CCL, there are three sections titled, “License Requirements,” “License Exceptions,” and “List of Items Controlled.” Only the “List of Items Controlled” section of an ECCN needs to be reviewed to determine if the item is described in the CCL and not the USML. This section provides “Units,” “Related Controls,” “Related Definitions,” and “Items” applicable to the ECCN entry.

(a) Related Controls as shown in Figure 4 will indicate if another U.S. Government agency or department has authority and control.

**Figure 4. Example of Related Controls**

**List of Items Controlled**

*Related Controls:*

- (1) See Category XV of the USML for certain “space-qualified” electronics and Category XI of the USML for certain ASICS “subject to the ITAR” (see 22 CFR parts 120 through 130).
- (2) See also 3A101, 3A201, 3A611, 3A991, and 9A515.

(b) The items described in the ECCN are listed following the word "Items." The coder must be careful when reading an ECCN for the first time to avoid missing this information and possibly interpreting the ECCN header as the definitive item identification (see Figure 5 for an example). In some entries, the list is contained within the entry heading as shown in Figure 6.

**Figure 5. Example of Items Header**

*Related Definitions:* N/A  
*Items:*  
Military aircraft, demilitarized (not specifically equipped or modified for military operation), as follows:

**Figure 6. Example of Items Controlled in ECCN Heading**

*Items:*  
The list of items controlled is contained in the ECCN heading.

**e. DEMIL Coding of Non-Military or Non-Spacecraft CCL Items.**

(1) Coders assign:

- (a) DEMIL code "Q" for items with a specific ECCN.
- (b) DEMIL code "A" for items that do not have a specific ECCN

(2) Items assigned DEMIL code "A" are still subject to the EAR in accordance with Parts 730-774 of Title 15, CFR and designated "EAR99" as shown in Figure 7. These may require a license from the DOC for export.

**Figure 7. EAR99 Statement**

**EAR99 Items subject to the EAR that are *not* elsewhere specified in this CCL Category or in any other category in the CCL are designated by the number *EAR99*.**

**4.2. SENSITIVE AND NON-SENSITIVE CCLI.** After the coders assign a DEMIL code "Q" for items with a non 600 series ECCN, the DoD DEMIL Program Manager and the DoD DEMIL Coding Management Office:

- a. Identify the sensitive and non-sensitive CCLI.
- b. Assign an integrity code based on the reason for control as shown in Figure 8.

**Figure 8. Sensitivity Based on Reasons for Control**

<b>SENSITIVE DEMIL Q IC-3</b>	<b>NON-SENSITIVE DEMIL Q IC-6</b>
NS = National Security = 0	AT = Anti-Terrorism = 9
NS = National Security (Spacecraft) = 5	CC = Crime Control = 9
NS = National Security (Military) = 6	EI = Encryption Items = 9
MT = Missile Technology = 1	FC = Firearms Convention = 9
NP = Nuclear Nonproliferation = 2	RS = Regional Stability = 9
CB = Chemical & Biological Weapons = 3	SS = Short Supply = 9
CW = Chemical Weapons Convention = 3	UN = United Nations Embargo = 9
	SI = Significant Items = 9
	SL = Surreptitious Listening = 9

## GLOSSARY

### G.1. ACRONYMS.

AE	ammunition and explosives
AFTTP	Air Force Tactics, Techniques, and Procedures
ASD(L&MR)	Assistant Secretary of Defense for Logistics and Materiel Readiness
ASIC	application specific integrated circuit
ATP	Army Techniques Publication
CAS	Chemical Abstracts Service
CCL	Commerce Control List
CCLI	Commerce Control List item
CE90	circular error at 90 percent confidence
CFR	Code of Federal Regulations
dB	decibel
dBm	decibel-milliwatts
DEMIL	demilitarization
DL	delta lambda
DLA	Defense Logistics Agency
DOC	Department of Commerce
DoDD	DoD directive
DoDI	DoD instruction
EAR	Export Administration Regulations
ECCN	Export Control Classification Number
Em	electromagnetic
fGHz	frequency in gigahertz
ft	feet
FWHM	full width at half maximum
GHz	gigahertz
GNSS	Global Navigation Satellite System
GPS	global positioning system
GSD	ground sample distance
Gy	gray
HMD	helmet mounted display
IC	integrity code
kg	kilogram
kHz	kilohertz

km	kilometer
kW	kilowatt
lbf	pound-force
LPI	low probability of intercept
MANPADS	man-portable air defense systems
MCRP	Marine Corps Reference Publication
MeV	million electron volts
MHz	megahertz
MIL-DTL	Military Detail Specification
MIL-PRF	Military Performance Specification
MLI	Munitions List Item
mm	millimeter
MMIC	monolithic microwave integrated circuit
mPa	megapascal
MUT	mutilation
NIJ	National Institute of Justice
nm	nanometer
nmi	nautical mile
NSN	national stock number
NTTP	Naval Tactics, Techniques and Procedures
PLD	programmable logic devices
Psat	saturated peak output power
Rads	absorbed radiation dose
RCS	radar cross section
RF	radio frequency
Si	system of units
SLV	space launch vehicle
SME	significant military equipment
UAV	unmanned aerial vehicle
USD(AT&L)	Under Secretary of Defense for Acquisition, Technology, and Logistics
USML	U.S. Munitions List
VNIR	visible and near infrared
WHEC	Coast Guard high endurance cutter
WMEC	Coast Guard medium endurance cutter
WMSL	Coast Guard maritime security cutter, large
WPB	Coast Guard patrol boat

**G.2. DEFINITIONS.** Unless otherwise noted, these terms and their definitions are for the purpose of this issuance.

**accessories and attachments.** Defined in Parts 120-130 of Title 22, CFR.

**AE.** Defined in DoD 6055.09-M.

**CCL.** Defined in Part 772 of Title 15, CFR.

**CCL Military items.** Any item previously controlled on the U.S. Munitions List that was moved to the CCL under the Export Control Reform Initiative.

**CCLI.** Defined in Part 774 of Title 15, CFR.

**components.** Defined in Parts 120-130 of Title 22, CFR.

**defense articles.** Defined in Section 120.6 of Title 22, CFR.

**defense services.** Defined in Section 120.9 of Title 22, CFR.

**DEMIL.** The act of eliminating the functional capabilities and inherent military design features from DoD personal property that requires certification and verification. Methods and degree range from removal and destruction of critical features to total destruction by cutting, crushing, shredding, melting, burning, etc. DEMIL is required to prevent property from being used for its originally intended purpose and to prevent the release of inherent design information that could be used against the United States. DEMIL applies to material in both serviceable and unserviceable condition.

**DEMIL code.** A code assigned to DoD personal property. It indicates the degree of required physical destruction, identifies items requiring specialized capabilities or procedures, and identifies items which do not require DEMIL but may require TSC. It is used throughout the life-cycle to identify control requirements required before release of DoD personal property from DoD control.

**disposal.** Defined in DoDM 4160.21.

**disposition.** Defined in DoDM 4160.21.

**DoD personal property.** Defined in DoDM 4160.21.

**dual-use.** Defined in Parts 730-774 of Title 15, CFR.

**EAR99.** Items subject to the EAR in accordance with Parts 730-774 of Title 15, CFR that are not elsewhere specified in a CCL category.

**ECCN.** Defined in Parts 730-774 of Title 15, CFR.

**end items.** Defined in Parts 120-130 of Title 22, CFR.

**export.** Defined in DoDI 2030.08.

**firearm.** A weapon not over .50 caliber (12.7 mm) which is designed to expel a projectile by the action of an explosive or which may be readily converted to do so.

**HAVE QUICK.** Defined in ATP 6-02.72/MCRP 3-40.3A /NTTP 6-02.2 /AFTTP 3-2.18.

**key points for DEMIL.** The parts, components, alignment points, attachment fittings, or features of a next higher assembly which require DEMIL.

**materiel.** Defined in DoDI 4140.01.

**major components.** Components essential to the operation of an end item and become key points for DEMIL.

**minor components.** Components that are elements of a major component that do not require DEMIL but may require MUT.

**MLI.** Any item contained on the USML listed in Part 121 of Title 22, CFR.

**MUT.** The act of making non-DEMIL required MLI or CCLI unfit for its intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

**ohms-per-square.** The unit of measurement when measuring the resistance of a thin film of a material using the four point probe technique. It is equal to the resistance between two electrodes on opposite sides of a theoretical square. The size of the square is unimportant.

**parts.** Defined in Parts 120-130 of Title 22, CFR.

**payload.** The total mass that can be carried or delivered by the specified rocket, SLV, or missile that is not used to maintain flight.

**pistol.** A hand-operated firearm having a chamber integral with or permanently aligned with the bore.

**power supplies.** A source of electric power to operate electronic circuits.

**range.** The maximum distance that the specified rocket system is capable of traveling in the mode of stable flight as measured by the projection of its trajectory over the surface of the Earth. The maximum capability based on the design characteristics of the system, when fully loaded with fuel or propellant, will be taken into consideration in determining range. The range for rocket systems will be determined independently of any external factors such as operational restrictions, limitations imposed by telemetry, data links, or other external constraints. For rocket systems, the range will be determined using the trajectory that maximizes range, assuming International Civil Aviation Organization standard atmosphere with zero wind.

**revolver.** A hand-operated firearm with a revolving cylinder containing chambers for individual cartridges.

**rifle.** A shoulder firearm.

**scrap.** Defined in DoDI 2030.08.

**significant military equipment.** Defined in Parts 120-130 of Title 22, CFR.

**specially designed.** Defined in Part 120.41 of Title 22, CFR for Part 1 of Tables 3 to 23. Defined in Part 772 of Title 15, CFR for Part 2 of Tables 3 to 23.

**subject to the EAR.** Defined in Part 734.2 of Title 15, CFR.

**submachine gun.** A firearm designed to fire automatically by a single pull of the trigger.

**technical data.** Defined in Parts 120-130 of Title 22, CFR.

**TEMPEST.** Defined in the DoD Dictionary of Military and Associated Terms.

**trade security controls.** Defined in DoDI 2030.08.

**USML.** A list, published by the Department of State in Part 121 of Title 22, CFR which delineates the articles, services, and related technical data designated as defense articles and defense services.

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# Department of Defense MANUAL

NUMBER 4160.28, Volume 3  
June 7, 2011  
*Incorporating Change 1, February 9, 2018*

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USD(AT&L)-USD(A&S)

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SUBJECT: Defense Demilitarization: Procedural Guidance

References: See Enclosure 1

## 1. PURPOSE

a. Manual. This Manual is composed of several volumes, each containing its own purpose. In accordance with the authority in DoD Directive (DoDD) 5134.01 (Reference (a)) and *Deputy Secretary of Defense Memorandum (Reference (af))* and DoDD 5134.12 (Reference (b)), this Manual implements the policy in DoD Instruction (DoDI) 4160.28 (Reference (c)), assigns responsibilities, and provides procedures for assessing demilitarization (DEMIL) requirements and performing physical DEMIL of DoD personal property.

b. Volume. This Volume:

- (1) Provides procedural guidance for DEMIL of DoD personal property and related disposition prior to release from DoD control including certification and verification.
- (2) Incorporates applicable portions of DoD 4160.21-M-1 (Reference (d)).

2. APPLICABILITY. This Volume applies to OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities in the DoD (hereinafter referred to collectively as the “DoD Components”).

3. DEFINITIONS. See Glossary.

4. RESPONSIBILITIES. See Enclosure 2.

5. PROCEDURES. Enclosure 3 provides procedures for the physical DEMIL of DoD personal property and Enclosure 4 provides related disposition procedures.

6. RELEASABILITY. UNLIMITED. This Volume is approved for public release and is available on the DoD Issuances Website at <http://www.dtic.mil/whs/directives>.

*Cleared for public release. This Volume is available on the Directives Division Website at http://www.esd.whs.mil/DD/.*

7. EFFECTIVE DATE. This Volume is effective upon its publication to the DoD Issuances Website, June 7, 2011.



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Performing the duties of the  
Assistant Secretary of Defense for  
Logistics and Materiel Readiness

Enclosures

1. References
2. Responsibilities
3. Physical DEMIL
4. Disposition

Glossary

TABLE OF CONTENTS

ENCLOSURE 1: REFERENCES.....	5
ENCLOSURE 2: RESPONSIBILITIES.....	7
DIRECTOR, DEFENSE LOGISTICS AGENCY (DLA) .....	7
DIRECTOR, DEFENSE SECURITY COOPERATION AGENCY (DSCA) .....	7
HEADS OF THE DOD COMPONENTS.....	7
ENCLOSURE 3: PHYSICAL DEMIL.....	8
INTRODUCTION .....	8
DEMIL METHOD.....	8
DEMIL PROCEDURES.....	9
RESIDUAL MATERIALS .....	9
DEMANUFACTURING OF MILITARY ELECTRONICS .....	10
CERTIFICATION OF DEMIL.....	10
APPENDIX: METHOD AND DEGREE OF DEMIL .....	13
ENCLOSURE 4: DISPOSITION .....	45
INTRODUCTION .....	45
REPORTING EXCESS PROPERTY .....	45
TYPES OF DISPOSITION.....	48
EXCHANGE AND/OR SALE OF DOD PERSONAL PROPERTY .....	49
SPECIAL PROGRAMS .....	50
MATERIAL WITHOUT A NATIONAL STOCK NUMBER (NSN).....	50
APPENDIX: PROPERTY REQUIRING SPECIAL PROCESSING.....	51
GLOSSARY .....	58
PART I. ABBREVIATIONS AND ACRONYMS .....	58
PART II. DEFINITIONS.....	59
FIGURES	
1. Sample Format of a DEMIL Certificate .....	11
2. Sample Format of a Declassification Certificate .....	12
3. Machine Gun with Tripod.....	13
4. 7.62mm Coaxial Machine Gun.....	13
5. Assault Rifle.....	14
6. Machine Gun Tripod Mount.....	15

7. Breechring and Sliding Breechblock .....	16
8. Interrupted Thread Breechblock .....	16
9. 20mm Gun .....	17
10. Artillery Tube.....	18
11. Mortar Tube .....	18
12. Hydropneumatic Recoil Mechanism.....	19
13. Nitrogen Cylinder .....	20
14. Recoil Rod .....	21
15. Hydropneumatic Equilibrator .....	21
16. Spring-Type Equilibrator .....	22
17. Concentric Recoil Mechanism-Type Cannon.....	22
18. Concentric Recoil Mechanism-Type Gun Launcher .....	23
19. 40mm Grenade Launcher, M203 .....	25
20. 40mm Automatic Grenade Launcher, Mk19 .....	26
21. Rocket Launcher .....	26
22. 5"/62 Naval Gun Mount.....	28
23. Tank, Combat, Full Tracked .....	29
24. Personnel Carriers .....	30
25. Tank Recovery Vehicles .....	30
26. Grenade Projector Mounts .....	31
27. Up-Armored Truck .....	32
28. 7.62mm Machine Gun – 40mm Grenade Launcher Helicopter Armament Subsystem ..	34
29. Single Engine Aircraft .....	34
30. Multi-Engine Aircraft .....	35
31. Attack Helicopter.....	35
32. Aircraft Pylons and Pylon Parts.....	36
33. Aviation Combined Arms Tactical Trainer .....	37
34. Rifle Marksmanship Trainer Weaponeer.....	37
35. Specialized Camouflage Netting.....	40
36. Satellite Signals Navigation Set.....	41
37. Interim Ground Station Module.....	42
38. Sample Format of a Material Documented As Safe (MDAS) Certificate .....	46
39. Sample Format of an Inert Certificate .....	47

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- (q) ~~DoD Instruction 2030.08, "Implementation of Trade Security Controls (TSC) for Transfers of DoD U.S. Munitions List (USML) and Commerce Control List (CCL) Personal Property to Parties Outside DoD Control," May 23, 2006~~
- (t) ~~DoD Directive 4140.1, "Supply Chain Materiel Management Policy," April 22, 2004~~
- (q) *DoD Instruction 2030.08, "Implementation of Trade Security Controls (TSC) for Transfers of DoD Personal Property to Parties Outside DoD Control," February 19, 2015, as amended*

- (r) *DoD Instruction 4140.01, "DoD Supply Chain Materiel Management Policy," December 14, 2011, as amended*
- (s) Parts 101 and 102 of title 41 Code of Federal Regulations
- (t) ~~DoD 4100.39-M, "Federal Logistics Information System (FLIS) Procedures Manual Glossary and Volumes 1-16," current edition~~
- (t) *DoD Manual 4100.39, "Federal Logistics Information System (FLIS) Procedures," March 8, 2017, as amended*
- (u) DoD Instruction 5030.59, "National Geospatial-Intelligence Agency (NGA) Limited Distribution Geospatial Intelligence (GEOINT)," December 7, 2006-March 10, 2015
- (v) DoD 4715.6-R, "Low-Level Radioactive Waste Disposal Program," January 17, 2001
- (w) Under Secretary of Defense for Acquisition, Technology, and Logistics Memorandum, "Nuclear Weapons Related Materiel (NWRM)," October 16, 2008<sup>1</sup>
- (x) ~~DoD 5100.76-M, "Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives," August 12, 2000~~
- (x) *DoD Manual 5100.76, "Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives (AA&E)," April 17, 2012*
- (y) Section 53 of title 26, United States Code
- (z) Defense Transportation Regulation 4500.9-R, "Defense Transportation Regulation Part II Cargo Movement," current edition
- (aa) ~~DoD 4000.25-2 M, "Military Standard Transaction Reporting and Accounting Procedures (MILSTRAP)," September 19, 2001~~
- (aa) *Defense Logistics Manual 4000.25-2, "Military Standard Transaction Reporting and Accountability Procedures (MILSTRAP)", June 13, 2012*
- (ab) Part 478 of title 27, Code of Federal Regulations
- (ac) DoD 6055.09-M, "DoD Ammunition and Explosives Safety Standards," February 29, 2008  
*dates vary by volume*
- (ad) ~~Joint Publication 1-02, "Department of Defense Dictionary of Military and Associated Terms," as amended~~
- (ad) *Office of the Chairman of the Joint Chiefs of Staff, "DoD Dictionary of Military and Associated Terms," current edition*
- (ae) Parts 120-130 of title 22, Code of Federal Regulations
- (af) *Deputy Secretary of Defense Memorandum, "Implementation Guidance for the Establishment of the Office of the Under Secretary of Defense for Research and Engineering and the Office of the Under Secretary of Defense for Acquisition and Sustainment," January 31, 2018*

<sup>1</sup>Available at [http://www.acq.osd.mil/dpap/pdi/uid/attachments/USA001484-08\\_signed.pdf](http://www.acq.osd.mil/dpap/pdi/uid/attachments/USA001484-08_signed.pdf)

ENCLOSURE 2RESPONSIBILITIES

1. DIRECTOR, DEFENSE LOGISTICS AGENCY (DLA). The Director, DLA, under the authority, direction, and control of the ~~Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L))~~ (through the Assistant Secretary of Defense for Logistics and Materiel Readiness *Under Secretary of Defense for Acquisition and Sustainment*) and in addition to the responsibilities in section 4 of this enclosure, shall:

- a. Provide guidelines for the identification and DEMIL of DoD personal property to prevent its unauthorized use and the potential compromise of U.S. national security.
- b. Maintain centralized DEMIL centers within the DLA Disposition Services to perform required physical DEMIL.

2. DIRECTOR, DEFENSE SECURITY COOPERATION AGENCY (DSCA). The Director, DSCA, under the authority, direction, and control of the Under Secretary of Defense for Policy, for DoD personal property provided under security assistance programs in accordance with DoDD 5105.38-M 5105.65 (Reference (e)), and in addition to the responsibilities in section 4 of this enclosure, shall assist Security Cooperation Organizations (SCO) in responding to issues associated with DEMIL requirements and, as necessary on a case-by-case basis, support SCO supervision of approved DEMIL performance.

3. HEADS OF THE DoD COMPONENTS. The Heads of the DoD Components shall:

- a. Perform physical DEMIL of DoD personal property within their respective Component as soon as practical after the property is determined not to be required within the DoD.
- b. Administer DEMIL requirements as provided for in terms and conditions of assigned contracts.

ENCLOSURE 3PHYSICAL DEMIL

1. INTRODUCTION. This enclosure contains information on selecting the method and degree of DEMIL, performance considerations, and certification and verification requirements for DoD personal property. DLA Disposition Services sites, DoD Components, and the Military Services have the capability to perform DEMIL for select items. See DoD *Manual 4160.21-M* (Reference (f)) for the process of turning in DEMIL required items to DLA Disposition Services site.

Available services for some items not normally accepted by a DLA Disposition Services site are:

a. Ammunition and Explosives (AE). (U.S. Munitions List (USML) Categories III, IV, and V). The Single Manager for Conventional Ammunition (SMCA) is responsible for DEMIL of conventional ammunition in accordance with DoDD 5160.65 (Reference (g)).

b. Aircraft (USML Category VIII). The Single Manager for each variant of aircraft is responsible for developing a DEMIL workbook with the Aerospace Maintenance and Regeneration Group. This workbook shall be created and updated in accordance with Reference (f) and Volume 2 of this Manual.

c. Vessels (USML Categories VI and XX). The Navy is responsible for disposing of warships in accordance with section 7306 of title 10, United States Code (Reference (h)), while the Maritime Administration is authorized as the disposal agent for Federal Government-owned obsolete, merchant type vessels that are equal to or greater than 1500 gross tons.

d. Classified Items. Volume 2 of this Manual contains information regarding DEMIL of classified items.

e. Contractor Inventory. DoD Components provide oversight for DEMIL and plant clearance in accordance with part 45 of title 48, Code of Federal Regulations (CFR) (Reference (i)) and subpart 245.6 of the Defense Federal Acquisition Regulation Supplement (Reference (j)).

2. DEMIL METHOD. The DEMIL method is influenced by the specific DEMIL requirement and available personnel skills, tools, and equipment that may vary among different performing organizations. Several factors influence the determination of the method of DEMIL.

a. DEMIL Code. DEMIL code requirements are identified in Table 1 of Volume 2 of this Manual.

b. Item Technical Characteristics. Material content, hazardous materials content, and physical configuration significantly influence the equipment, tools, and techniques that may be employed.

c. Qualified Personnel. Personnel performing a physical DEMIL function must be technically qualified and trained appropriately for processes and equipment use. These qualifications vary depending on the techniques and equipment used and is the responsibility of the organization to which the DEMIL personnel are employed. In addition, personnel verifying that the completed DEMIL is adequate, must be sufficiently knowledgeable of the DEMIL requirements for the material being processed to be able to verify through visual inspection that the destructive action taken is sufficient to have met the DEMIL requirement.

### 3. DEMIL PROCEDURES

a. Procedures for accomplishing physical DEMIL range from detailed, step-by-step procedures unique to a specific item (e.g., DEMIL code "F" items) to those that can be applied to a more general range of items (e.g., operation of an industrial shredder) and those that apply a general technique (e.g., torch cutting) using a standard operating procedure. General principles to aid in procedure development are:

(1) Technical data shall be demilitarized by burning, crosscut shredding, or pulping.

(2) Test equipment may contain DEMIL required components.

(3) It is preferable to DEMIL items to the level of scrap. (See section 39 in appendix to Enclosure 4 for relevant information.)

b. Development of procedures should always make use of existing documentation in procedural DEMIL plans developed in accordance with the guidelines in Volume 1 of this Manual. DEMIL plans should be requested from the applicable weapon system program manager. Also, some plans will be made available on the DoD DEMIL website at <https://demil.osd.mil>.

c. The Appendix to this enclosure provides guidance regarding the method and degree of required DEMIL of DoD personal property. The method and degree of DEMIL required and a description of key points requiring destruction are described for selected items in the USML. Each category in the Appendix of this enclosure corresponds to the same category in Enclosure 3 of Volume 2 of this Manual.

### 4. RESIDUAL MATERIALS

a. If the DEMIL actions do not reduce the item to scrap, the material remaining must be evaluated to determine if it carries additional DEMIL or Trade Security Controls (TSC) requirements. For example a DEMIL code "P" item may require further DEMIL after the classified material, information, or feature has been addressed. Similarly, a DEMIL code "F" or "G" item may require further DEMIL after the hazardous aspect has been addressed or after the energetic material has been removed, respectively.

b. If the DEMIL action is complete, the residue is still subject to export controls, in accordance with parts 730 through 774 of title 15, CFR (Reference (k)).

## 5. DEMANUFACTURING OF MILITARY ELECTRONICS

a. Demanufacturing contractors can receive usable and non-usable DEMIL and non-DEMIL required materiel. Military electronics shall be shredded or crushed, preferably to the point of pulverization.

b. Electronic equipment received at a DLA Disposition Services site that does not require DEMIL may still require TSC.

## 6. CERTIFICATION OF DEMIL

a. Certification. A certificate as shown in the sample format in Figure 1 shall be signed and dated by a DoD contracted person or a Government employee who actually performed or witnessed the DEMIL. The certificate shall be executed for all line items demilitarized. If the item is classified, it must first be declassified and certified as shown in the sample format in Figure 2.

b. Verification. The DEMIL certificate must be verified by a technically qualified DoD contracted person or a Government employee who witnessed the DEMIL of the material or inspected the residue. The individual who verifies the DEMIL should generally be at least in the next higher management or technical level to the initial certifying individual and must be a U.S. citizen.

(1) The certification and verification shall include the printed or typed name, grade, rank, or title, and activity of each signatory.

(2) Signing false DEMIL certificates constitutes a felony and may subject the individual to prosecution.

c. Contractor Sites. These sites are required to have a Government employee acting as a verifier during all DEMIL activities. To certify that DEMIL is complete, a certifier works with the Government verifier to validate DEMIL.

d. Records Retention Policy for DEMIL Certificates. DoD is responsible for managing their records and documents in accordance with DoDD 5015.2 DoDI 5015.02 (Reference (l)).

Figure 1. Sample Format of a DEMIL Certificate

Title:	Certification of Demilitarization
<b>Description:</b> A certification statement as shown shall be signed and dated by a DoD contracted person or a Government employee who actually performed or witnessed the DEMIL.	The certificate shall be verified by a technically qualified DoD contracted person or a Government employee who witnessed the DEMIL of the material or inspected the residue. The individual who verifies the DEMIL should generally be at least in the next higher management or technical level to the initial certifying individual and must be a U.S. citizen.
Disposal Turn-In Document:	QTY:
National Stock Number or Description:	
<b>Certification Statement:</b>	
I CERTIFY THAT THE ITEMS(S) LISTED HEREON HAS/HAVE BEEN DEMILITARIZED IN ACCORDANCE WITH DoD MANUAL 4160.28, VOLUME 3, "DEFENSE DEMILITARIZATION: PROCEDURAL GUIDANCE," CATEGORY _____, PARAGRAPH _____ AND/OR THE FOLLOWING APPLICABLE REGULATION:	
Signature (Certifier): _____ Date _____	
Printed Name/Grade/Rank: _____	
Title: _____	
Phone (COM/DSN/FAX): _____	
Address: _____ _____ _____	
====== ======	
Signature (Verifier): _____ Date _____	
Printed Name/Grade/Rank: _____	
Title: _____	
Phone (COM/DSN/FAX): _____	
Address: _____ _____	
<b>Reference:</b>	DoD Manual 4160.28, Volume 3, "Defense Demilitarization: Procedural Guidance," current edition

Figure 2. Sample Format of a Declassification Certificate

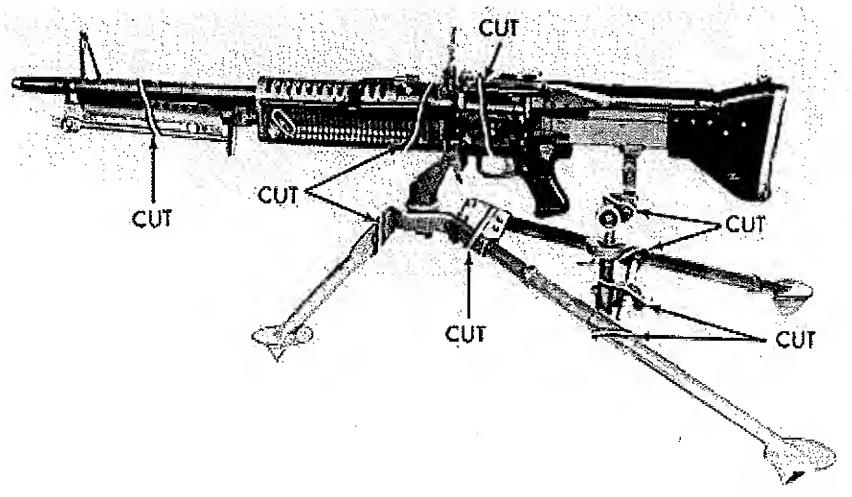
Title:	<b>Certificate of Declassification</b>	
<b>Description:</b>	All items that have been classified in the interest of national security regardless of use, purpose, or end item application require DEMIL. Classified material shall be declassified and demilitarized prior to transfer to a DLA Disposition Services site. Certification of declassification shall be annotated on the turn-in document.	
Disposal Turn-In Document:	QTY:	
National Stock Number or Description:		
<b>Certification Statement:</b>		
I CERTIFY THE ITEM(S) HEREON HAS BEEN DECLASSIFIED / SANITIZED AND TO THE BEST OF MY KNOWLEDGE AND BELIEF CONTAIN NO SENSITIVE DATA/MARKINGS.		
Signature: _____		Date _____
Printed Name/Grade/Rank: _____		
Title: _____		
Phone (COM/DSN/FAX): _____		
Address: _____ _____		
<b>Reference:</b>	DoD Manual 4160.28, Volume 3, "Demilitarization Procedural Guidance," current edition	

**Appendix**  
**Method and Degree of DEMIL**

APPENDIX TO ENCLOSURE 3METHOD AND DEGREE OF DEMIL1. CATEGORY I. FIREARMS, CLOSE ASSAULT WEAPONS, AND COMBAT SHOTGUNS

a. DEMIL Code "D" Items. The preferred method of DEMIL for items assigned code "D" is smelting. An alternate DEMIL method is torch cutting, utilizing a cutting tip displacing 1/2 inch of metal at a minimum. All cuts shall completely sever the item, in accordance with instructions applicable to the items being demilitarized, as shown in the examples in Figures 3, 4, and 5. Shearing, crushing, deep water dumping, or smelting may be utilized when such methods of DEMIL are deemed cost effective or practicable and when authorized by the appropriate authority or the DoD DEMIL Program Manager (DDPM).

Figure 3. Machine Gun with Tripod



AR 900250

Figure 4. 7.62mm Coaxial Machine Gun

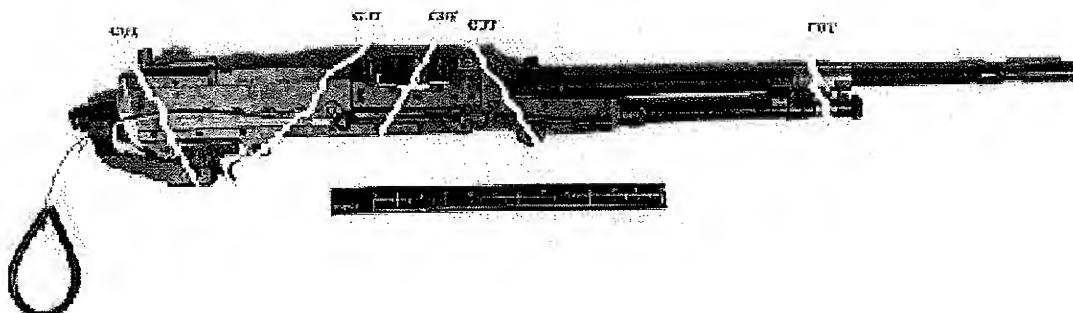
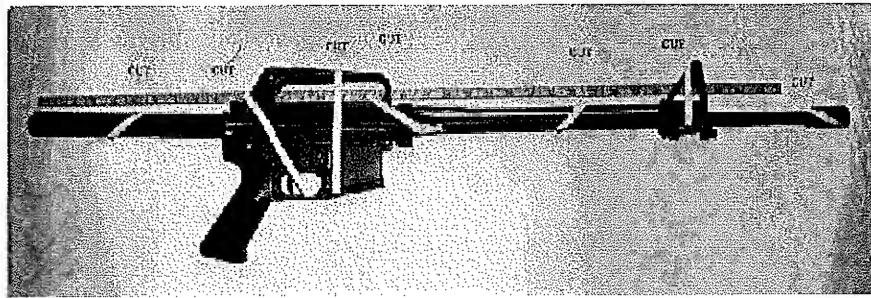


Figure 5. Assault Rifle



(1) Machine Guns. Machine guns shall be demilitarized by smelting, or by torch cutting utilizing a cutting tip that displaces 1/2 inch of metal at a minimum, or by shearing the receiver in a minimum of two places, or by crushing in a hydraulic or similar type press. Figures 3 through 5 illustrate the proper method of cutting a machine gun. The barrel shall be torch cut, sheared, or crushed in the chamber area and in two or more places to the extent necessary to prevent restoration to a useable condition. If shearing or crushing methods are used, the trunnion blocks and side frames must be completely cut through, broken, or distorted to preclude restoration to a usable condition.

(2) Receivers. Receivers shall be demilitarized by smelting; or by rotary shredding; or by shearing; or by torch cutting in a minimum of two places completely through the receiver as shown in Figures 4 and 5, utilizing a cutting tip that displaces 1/2 inch of metal at a minimum; or by crushing in a hydraulic or similar type press to preclude restoration to a usable condition.

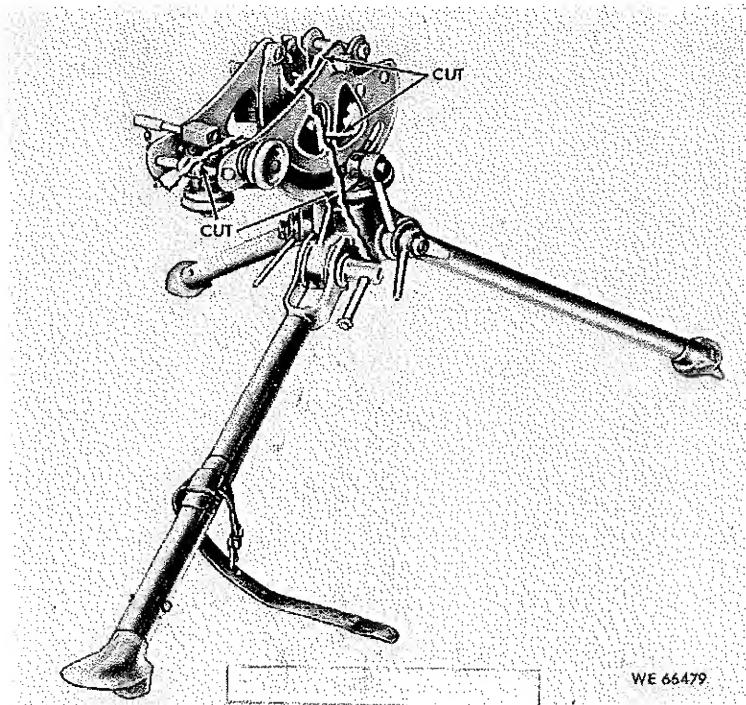
(3) Bolts and Barrels. Bolts and barrels shall be demilitarized by smelting or torch cutting utilizing a cutting tip that minimally displaces 1/2 inch of metal, or crushed to the extent necessary to preclude restoration to a usable condition. Barrels shall be demilitarized by cutting (rotary shredding, shearing, or torching utilizing a cutting tip that displaces at least 1/2 inch of metal). At least three cuts shall be made with at least one cut through the chamber area. All barrels shall have a torch cut along the length of the barrel at the chamber end. The chamber cut shall be at least one wall thickness of the barrel and shall cut through the entire length of the chamber. Cuts shall be made completely through the barrel. Bolts shall be demilitarized by cutting (shear or torch) in a minimum of two places. A torch-cutting tip that displaces at least 1/2 inch of metal shall be used and cuts shall be made completely through the bolt.

(4) Accessories. Accessories, including silencers, suppressors, mufflers, rifle scopes and military telescopic and optical sights including those designed for night sighting and viewing, and gun mounts (including bipods and tripods), shall be demilitarized by smelting, breaking, crushing, or cutting in a manner that precludes restoration to a usable condition, in accordance with instructions applicable to the items being demilitarized as shown in Figures 3 and 6.

(5) Other Metallic Parts. Other metallic parts, except what is considered common hardware, shall be demilitarized by cutting, crushing, or smelting. All other DEMIL-required

small arms and light weapons (SA/LW) components not listed in paragraph 1.a. and not already authorized for local DEMIL shall be processed in accordance with Volume 2 of this Manual.

Figure 6. Machine Gun Tripod Mount



b. DEMIL Code "C" Key Point Items. Some examples of key points include, but are not limited to, attachment points, fittings, moveable joints, lenses, and infrared (IR) sources. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

c. DEMIL Code "B" Items. Mutilation (MUT) to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

## 2. CATEGORY II. GUNS AND ARMAMENT

a. DEMIL Code "D" Items. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.

(1) Breechrings, Breech Chambers, Breech Couplings, Breechblocks, Breech Housings, Breechyokes, Breechplugs, and Firing Mechanisms. These items shall be cut through with the breechblock in the closed position (as shown in Figure 7) and through the firing mechanism (as

shown in Figure 8). Equivalent cutting of the breechring, breech chambers, breechblock, and firing mechanism as separate items is acceptable.

Figure 7. Breechring and Sliding Breechblock

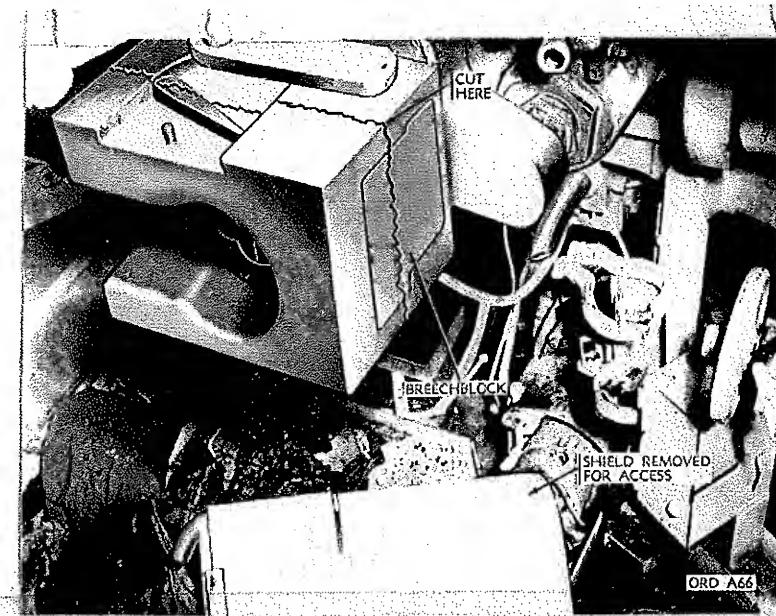
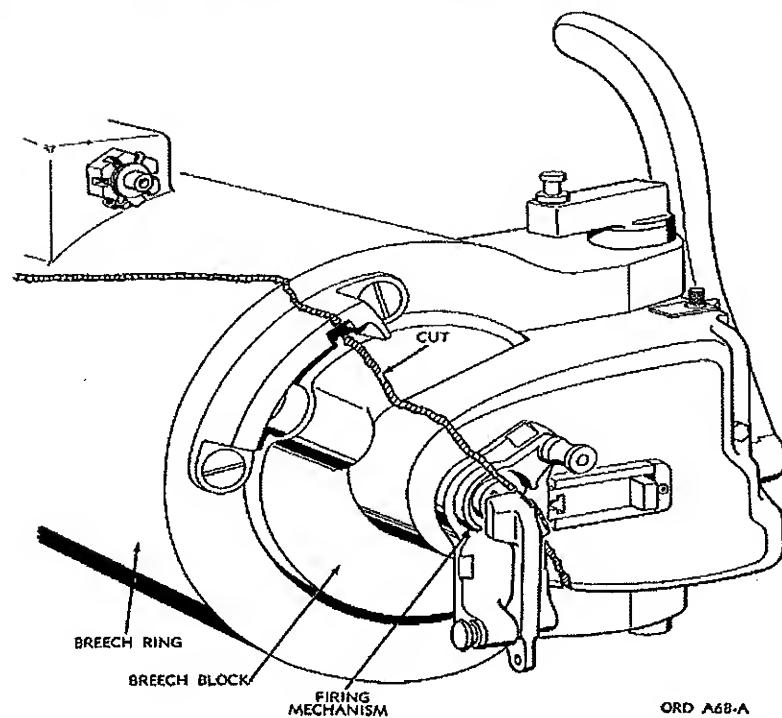


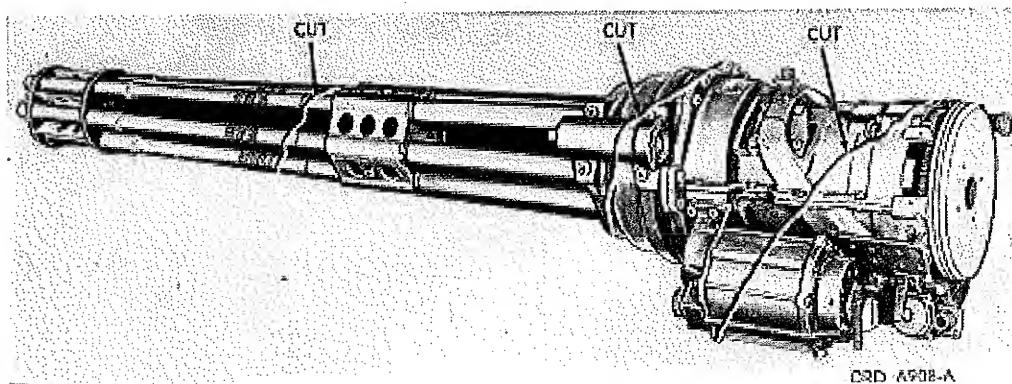
Figure 8. Interrupted Thread Breechblock



(2) 20mm Guns. 20mm guns shall be demilitarized by torch cutting utilizing a cutting tip that displaces 1/2 inch of metal at a minimum, as shown in Figure 9:

- (a) Cut through the body of the receiver to the rear of the cradle with the bolt assembly remaining in the weapon if furnished with the assembly.
- (b) Cut through the heavy portion of the barrel, the gas operating system, and recoil spring.
- (c) Torch the chamber opening in the barrel and forward portion of the bolt, if assembled in weapons, sufficiently to create a metal puddle.
- (d) Cut, shear, or crush the 20mm feeder.

Figure 9. 20mm Gun



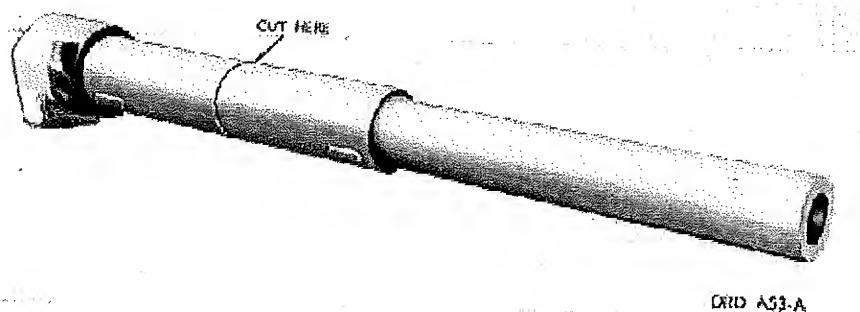
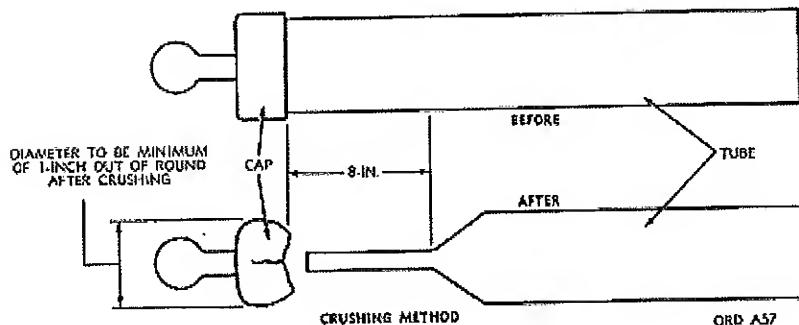
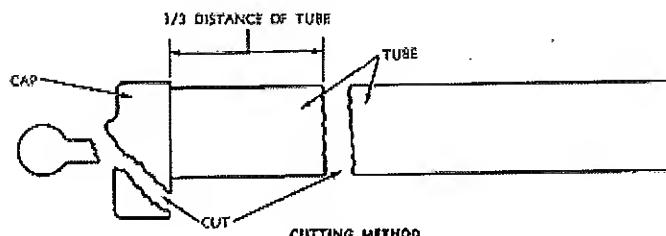
(3) Receivers (30mm guns). Receivers shall be cut into three sections by cutting through the barrel support section, with a second cut through the slideways.

(4) Receiver Casings. Receiver casings shall be cut completely through the casing body assembly near the rammer tray.

(5) Barrels (Guns and Howitzer). Barrels shall be cut into two pieces, the cut being made as near the point of origin of the rifling as possible but not more than one-third of the barrel length from the breech face of the tube as shown in Figure 10. Combat vehicle artillery shall be cut just in front of the mantlet or shield.

(6) Trunnions, Trunnion Bearings, and Trunnion Bearing Caps (not disassembled). Trunnions, trunnion bearings, and trunnion bearing caps (not disassembled) shall be cut completely through diagonally.

(7) Mortars. Mortars shall be cut by torch or crushed as shown in Figure 11.

Figure 10. Artillery TubeFigure 11. Mortar Tube

(a) When the cutting method is used, the tube shall be cut into two pieces, the cut being made one-third of the length of the tube from the cap end. The cap shall be cut into three pieces, the cut being made diagonally through the cap.

(b) When the crushing method is used, the mortar tube shall be crushed so that the inner surfaces of the tube touch for a distance of 8 inches, extending from the base cap end toward the muzzle end of the tube. The base cap shall be crushed until the largest diameter of the cap is out of round by a minimum of 1 inch.

(8) Military Flame Thrower Mechanisms. Military flame thrower mechanisms shall be cut, crushed, or broken.

(9) Hydropneumatic Recoil and Equilibrator Mechanisms

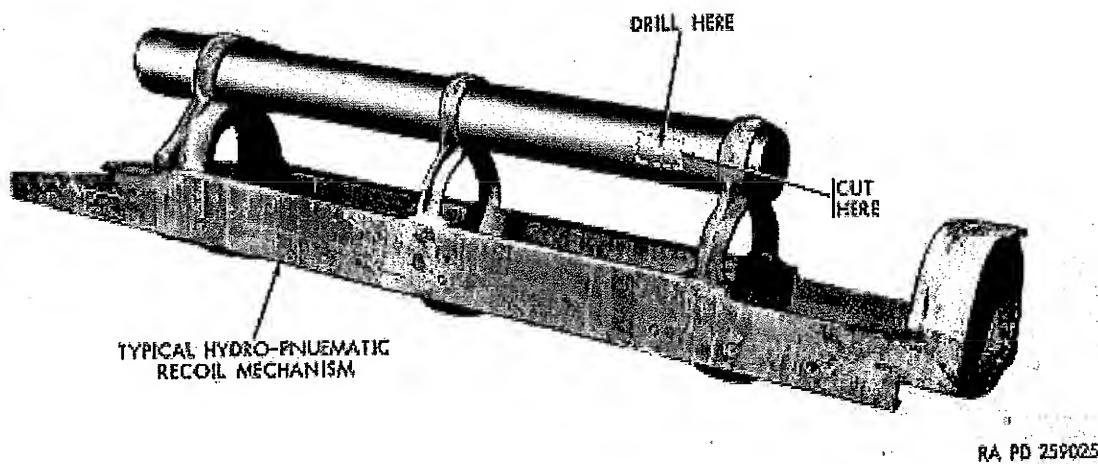
(a) DEMIL of recoil mechanisms and equilibrators must be accomplished by qualified personnel only.

(b) Prior to release of hydropneumatic recoil or equilibrator mechanisms (which in a broad sense includes counter-recoil (recuperator) mechanisms) to a disposal activity, reserve oil shall be drained and nitrogen pressure released by technically qualified personnel in accordance with instructions in the pertinent technical manuals.

(c) Oil and nitrogen release valves and drain plugs shall be left open during cutting operations.

(d) If the nitrogen pressure cannot be released due to a faulty valve, a 1/8-inch hole shall be drilled by technically qualified personnel in the wall of the nitrogen cylinder 6 inches from the nitrogen end, as shown in Figure 12, to release the pressure.

Figure 12. Hydropneumatic Recoil Mechanism



RA PD 259025

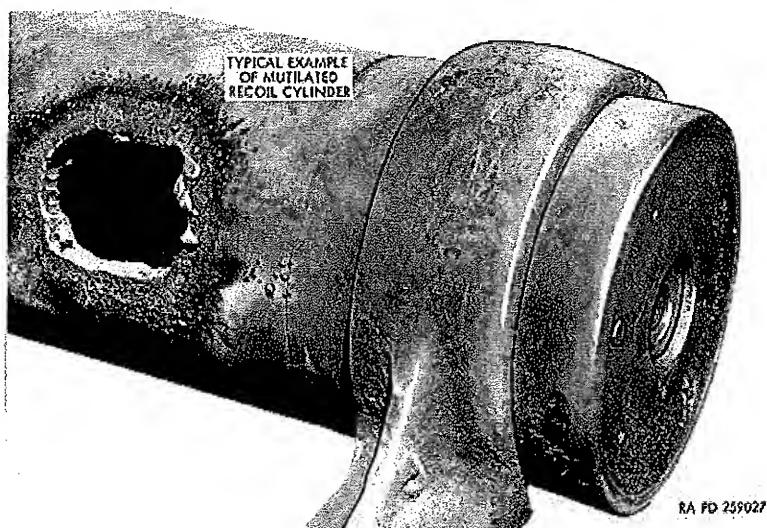
(e) Extreme caution should be exercised while drilling the hole in the nitrogen cylinder wall. A suitable safety shield should be used to protect personnel from the drill shavings that are expelled from the hole when the drill bit enters the nitrogen cylinder. Protection should also be provided for eyes, face, arms, and hands of personnel performing the operation.

(f) To prevent a possible internal buildup of oxygen and acetylene in the nitrogen cylinder during cutting operations, a 1/2-inch hole shall be drilled 6 inches from the end of the

nitrogen cylinder as shown in Figure 12. To perform this operation on the 155mm, 175mm, and 8-inch howitzer mechanisms, a section of the cover or housing must be cut away.

(g) Enlarge the 1/2-inch hole with a gas-cutting torch by removing a section of at least 2 square inches from the nitrogen or recuperator cylinder as shown in Figures 12 and 13. If qualified explosives personnel are available, a satisfactory hole can be made by the use of shaped charge instead of drilling and cutting with a torch.

Figure 13. Nitrogen Cylinder



(h) The recoil rod and counter-recoil rod, if present, shall be cut completely through and flush with the recoil and counter-recoil cylinder as shown in Figure 14. Hydropneumatic equilibrators such as those on the 155mm and 175mm guns and 8-inch howitzers shall be cut as shown in Figure 15.

(10) Hydrospring Recoil and Equilibrator Cylinder

(a) Drain the oil from the hydrospring recoil cylinders. On hydrospring cylinders, cut through the cylinder lengthwise, such that the cut is 4 inches or more in length and of sufficient depth to cut through at least two coils of the spring as shown in Figure 16. Concentric-type recoil mechanisms shall be cut through the cradle in the most accessible area, the cut to be of sufficient length and depth to cut at least two coils of the spring as shown in Figure 17.

(b) Hydrospring recoil and equilibrator mechanisms contain springs under high pressure; therefore, extreme caution must be exercised. DEMIL must be performed by technically qualified personnel only. No attempt should be made to cut the cylinder in two pieces without prior release of spring tension.

Figure 14. Recoil Rod

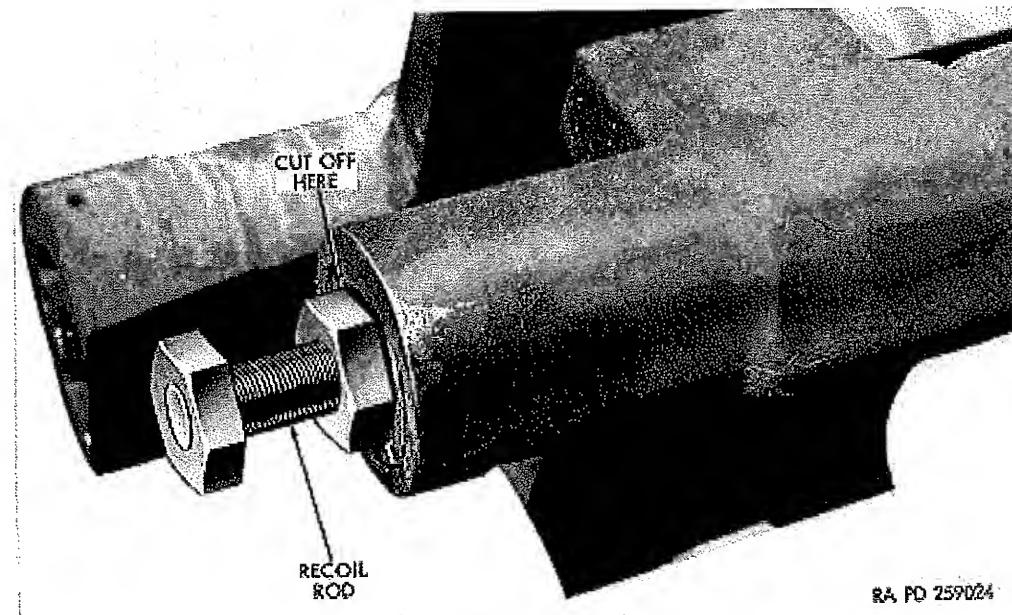


Figure 15. Hydropneumatic Equilibrator

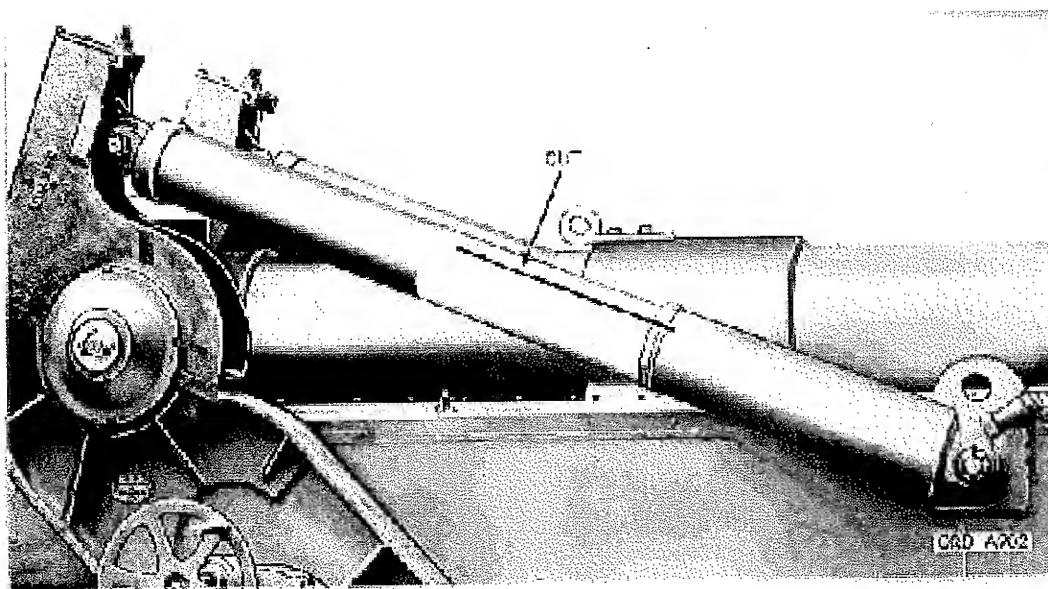


Figure 16. Spring-Type Equilibrator

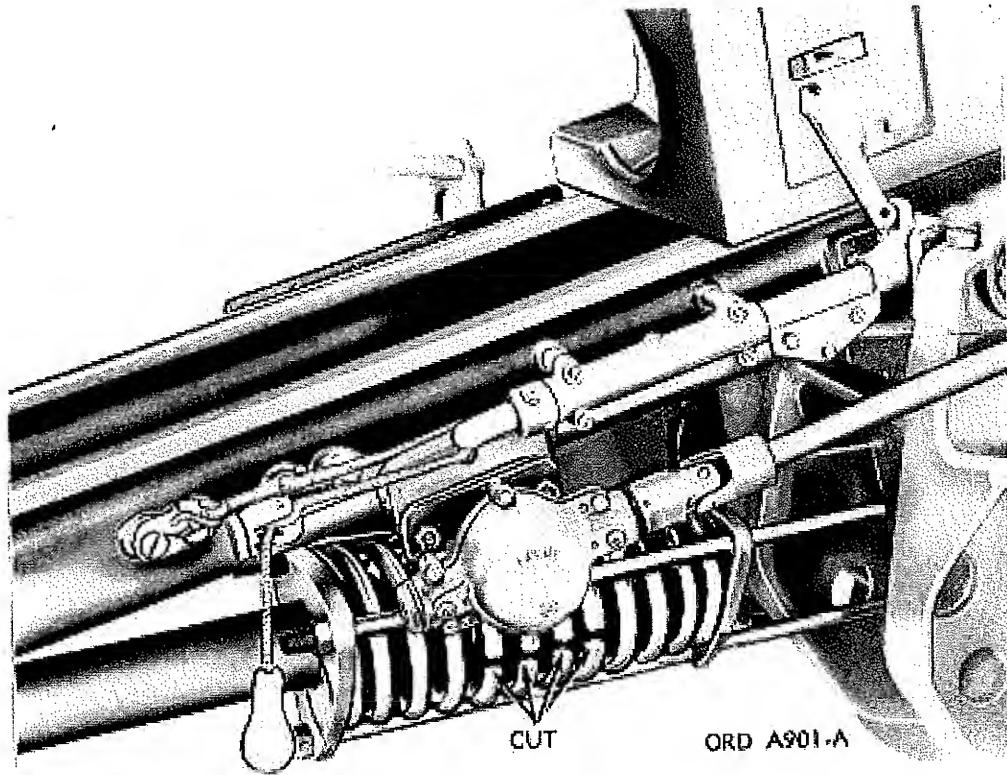
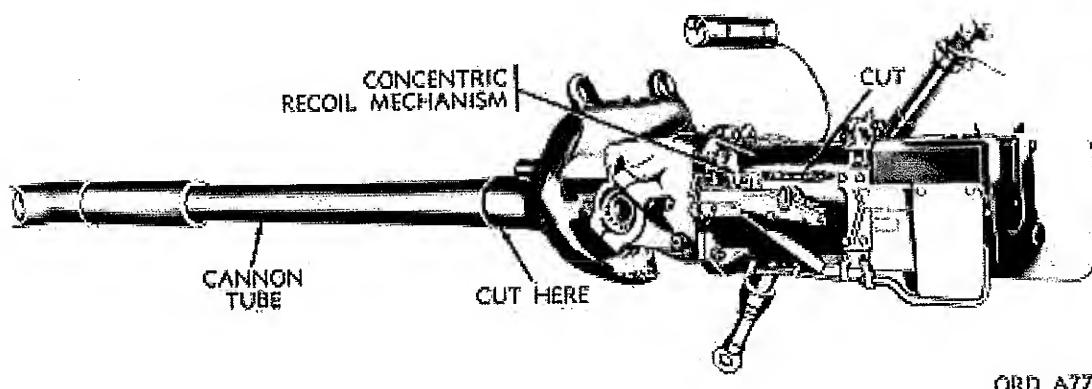


Figure 17. Concentric Recoil Mechanism-Type Cannon



(c) In the case of the 40mm automatic gun, the procedures are:

1. Remove the two drain plugs near the front of the recoil cylinder(s) and drain the recoil oil.

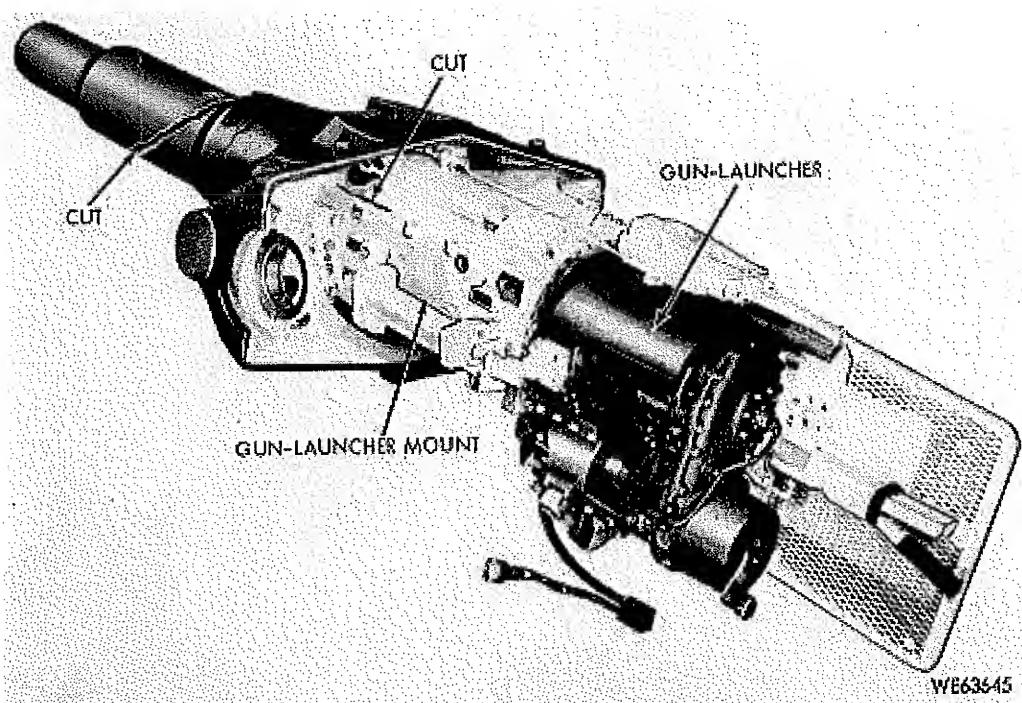
2. At a point just behind the recoil cylinder attaching bracket, cut completely through the tube of the casing body assembly, recoil cylinder(s), and barrel assembly(s) (if a barrel is installed on the gun).

3. Open the top cover(s) and cut longitudinally through the top portion of the breechring(s) and breechblock(s).

4. At a point between the front and rear loader guides, cut completely through the breech casing body(s) and tray(s).

(11) Spring-Type Equilibrators. Spring-type equilibrators such as the type used on the 105mm howitzers of the M2-series shall be cut through both inner and outer spring as shown in Figure 18.

Figure 18. Concentric Recoil Mechanism-Type Gun Launcher



(12) Top Carriages, Bottom Carriages, Mounts, and Outriggers. Top carriages, bottom carriages, mounts, and outriggers shall be cut through below the trunnion bearings.

(13) Turret Rings. Turret rings shall be cut in half utilizing a cutting tip that displaces 1/2 inch of metal at a minimum.

b. DEMIL Code "C" Key Point Items. Some example of key points include, but are not limited to, tubes and gun barrels, muzzle brakes, flame hiders, launching rails, receivers,

breechblocks, breech chambers, breech couplings, breechrings, breech housings, breechyokes, breechplugs, trunnion blocks, firing mechanisms, feeder mechanisms, release mechanisms, equilibrators, recoil mechanisms, recuperator mechanisms, torpedo tube muzzle and breechdoors, turret rings, flame thrower operating mechanisms, gun mounts, and carriages (see paragraph 2.a. for more examples of key points). All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

c. DEMIL Code "F" Items. See Enclosure 5 of Volume 2 of this Manual regarding the method to obtain special instructions.

d. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

### 3. CATEGORY III. AMMUNITION/ORDNANCE

a. DEMIL Code "D" Items. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.

(1) Inert Loaded Ammunition, Projectiles, and Similar Items of all Types Loaded with Inert Filler to Simulate a Service Item. Remove the fuse and/or spotting charge, where applicable, and burn or detonate. Remove the rotating band from artillery projectiles and open the closure of the projectile body to expose the inert filler. On items without rotating bands, open the body closure to expose the inert filler and damage the closure surface to prevent reloading or resealing. For inert loaded items (concrete, sand, plaster), a potential explosive safety hazard exists when the internal filler is not exposed or unconfined during burning, melting, or cutting. Heat generated from a DEMIL process can cause the filler, moisture, and air to expand and burst sealed casings. For this reason, disposal activities shall not accept inert loaded items unless the internal filler is exposed and unconfined. The internal filler may be exposed by removal of the fuze well from the cavity, removal of base plates, or by puncturing or drilling holes in the bomb casing.

(2) Ammunition And Components That Have Been Fired or Expended, Range Residue, and Other Non-Explosive Items. All items shall be rendered free of energetic materials prior to accomplishment of DEMIL. Range residue shall be processed in accordance with Reference (f) and DoDI 4140.62 (Reference (m)) after all required DEMIL is accomplished.

(3) Artillery and/or Mortar Ammunition Components and Similar Items of All Types. Remove the rotating band and deform fuze cavity threads or score or deform bourrelet or gas check band. Score practice round projectile with a torch, displacing a minimum of 1 cubic inch of metal or shear into two pieces. Deform fin assembly threads and fin blades.

(4) Other Non-Explosive Filled Items. Cut, crush, or process through a deactivation furnace. Burn or cut cartridge case lines and propelling charge bags. Cut, burn, or crush aircraft and ground signal cases. Crush or detonate piezoelectric elements.

b. DEMIL Code "C" Key Point Items. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

c. DEMIL Code "G" Items. The SMCA is responsible for DEMIL and disposal for conventional ammunition in accordance with Reference (g) and DoDI 5160.68 (Reference (n)). Technical instructions shall be furnished by the Military Services having overall knowledge and responsibility for disposal of the material.

d. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

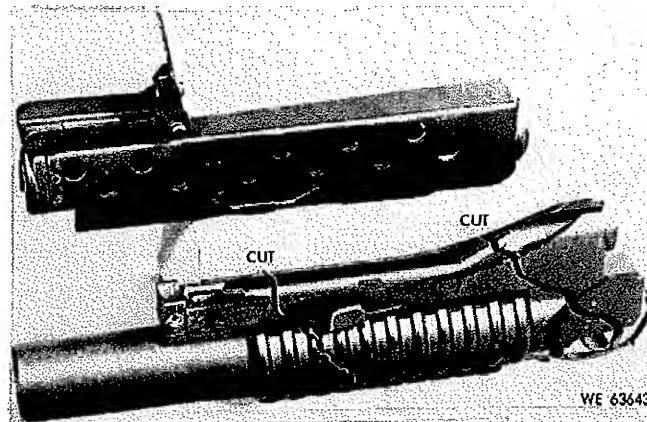
#### 4. CATEGORY IV. LAUNCH VEHICLES, GUIDED MISSILES, BALLISTIC MISSILES, ROCKETS, TORPEDOES, BOMBS, AND MINES

a. DEMIL Code "D" Items. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.

##### (1) Grenade Launchers

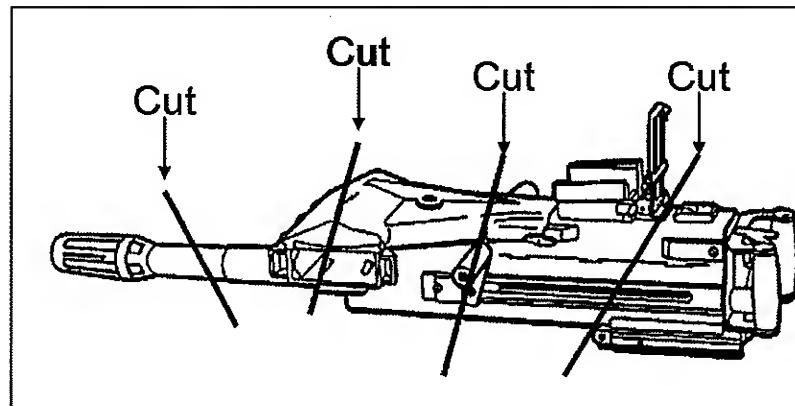
(a) The preferred method of destruction for extruded and cast aluminum construction items is crushing. Alternatively, cut as shown in Figure 19.

Figure 19. 40mm Grenade Launcher, M203



20: (b) In the case of automatic grenade launchers, make four cuts as shown in Figure

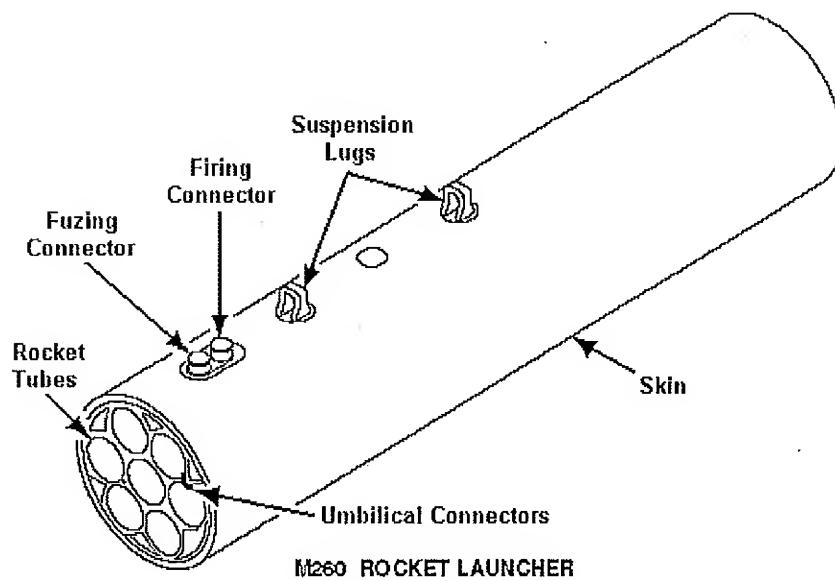
Figure 20. 40mm Automatic Grenade Launcher, Mk19



1. Just behind the suppressor.
2. Where the barrel and receiver connect.
3. Middle of receiver.
4. Where the rear sight and receiver connect.

(2) Rocket Launchers (Figure 21). Rocket launchers, including rails, shall be cut, crushed, or broken to render them inoperable and beyond restoration.

Figure 21. Rocket Launcher



(3) Torpedo Tubes

(a) The breechring shall be removed by cutting or sawing from the torpedo tube barrel. The point of cut in the barrel shall be approximately 6 to 12 inches forward from the face of the breechring. Remove the rotating breechlocking ring and cut in half.

(b) All muzzle and breechdoors shall be cut into two pieces of approximately equal sizes.

b. DEMIL Code "C" Key Point Items. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

c. DEMIL Code "G" Items. The SMCA is responsible for DEMIL and disposal for conventional ammunition in accordance with References (g) and (n).

d. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

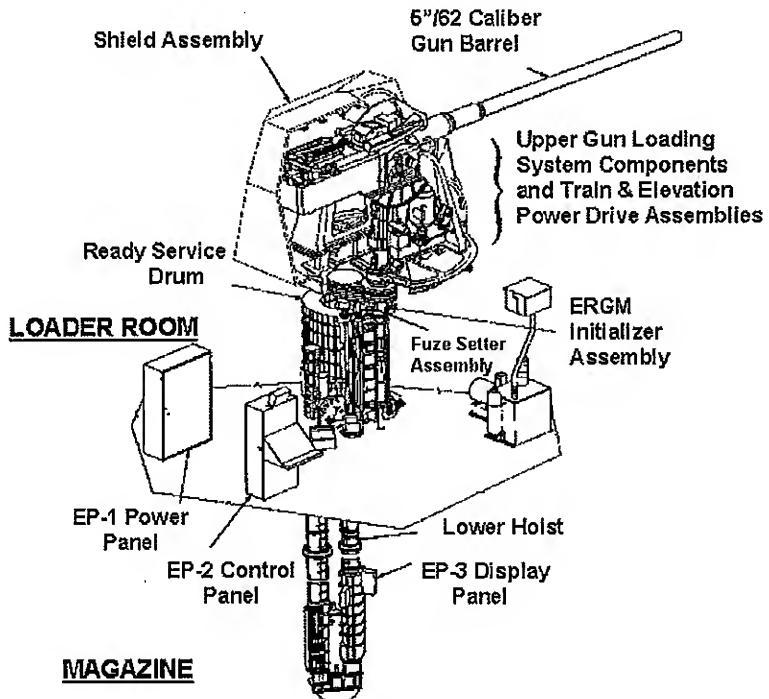
5. CATEGORY V. EXPLOSIVES AND ENERGETIC MATERIALS, PROPELLANTS, INCENDIARY AGENTS, AND THEIR CONSTITUENTS.

a. DEMIL Code "D" Items. Technical data shall be demilitarized by burning, crosscut shredding, or pulping.

b. DEMIL Code "G" Items. The SMCA is responsible for DEMIL and disposal for conventional ammunition in accordance with References (g) and (n). Technical instructions shall be furnished by the Military Services having overall knowledge and responsibility for disposal of the material.

6. CATEGORY VI. VESSELS OF WAR AND SPECIAL NAVAL EQUIPMENT. Warships and special naval equipment shall be demilitarized as prescribed by the appropriate Naval Sea Systems Command or other procuring Military Service and/or Defense Agency. See Enclosure 4 for procedures for special processing of these items.

a. DEMIL Code "D" Items. Navy gun mounts, Navy gun turrets, and other armored items, as shown in Figure 22, shall have the armor cut into at least four approximately equal sized pieces to destroy integrity and turret rings cut in two places. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.

Figure 22. 5"/62 Naval Gun Mount

b. DEMIL Code "C" Key Point Items. Armament, hulls (warships only), applicable items designated in other categories in this appendix, and other items designated by the Naval Sea Systems Command or other procuring Military Service and/or Defense Agency. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

c. DEMIL Code "F" Items. See Enclosure 5 of Volume 2 of this Manual regarding the method to obtain special instructions.

d. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

## 7. CATEGORY VII. TANKS AND MILITARY VEHICLES

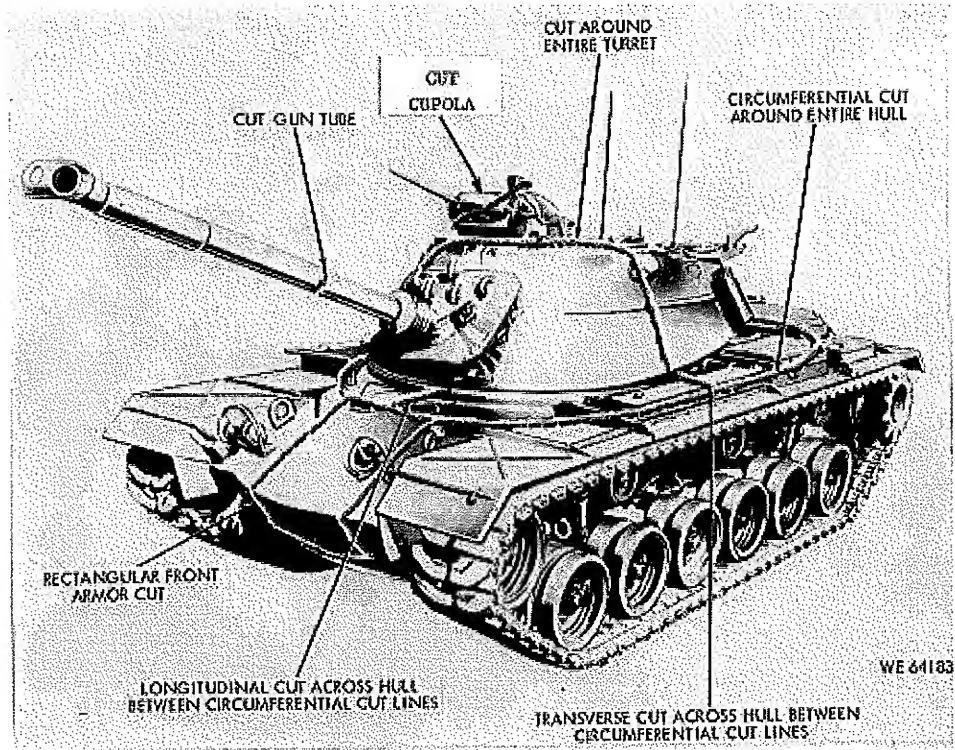
a. DEMIL Code "D" Items. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.

(1) Armament. Armament shall be demilitarized as prescribed for Categories I and II in sections 1 and 2 of this enclosure, respectively. DEMIL of the main armament (such as gun, howitzer, mortar, or rocket launcher) on combat vehicles may be accomplished on the vehicles or after removal from the vehicles.

(2) All Hinge-Mounted Items. All hinge-mounted items (such as doors, ramps, or hatches) shall be removed from the vehicle prior to cutting the hull.

(3) Turrets and/or Cupolas. Turrets and/or cupolas shall be cut into two sections as shown in Figure 23 and removed prior to cutting the hull.

Figure 23. Tank, Combat, Full Tracked



(4) Hulls and Chassis

(a) The top section of the hull on all vehicles shall be cut into four sections without affecting the suspension, as shown in Figures 23 through 25. To accomplish the hull cuts, a complete circumferential cut shall be made at or just above the track or wheel level and cuts shall be made across the top of the hull from the front center to the rear center (longitudinal) and from the left side center to the right side center (transverse).

Figure 24. Personnel Carriers

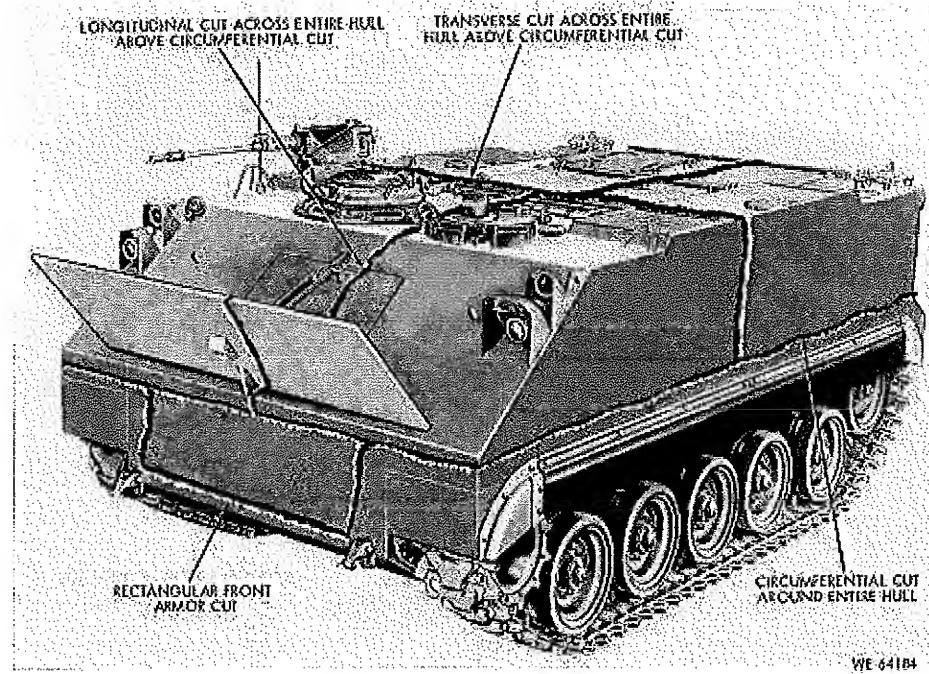
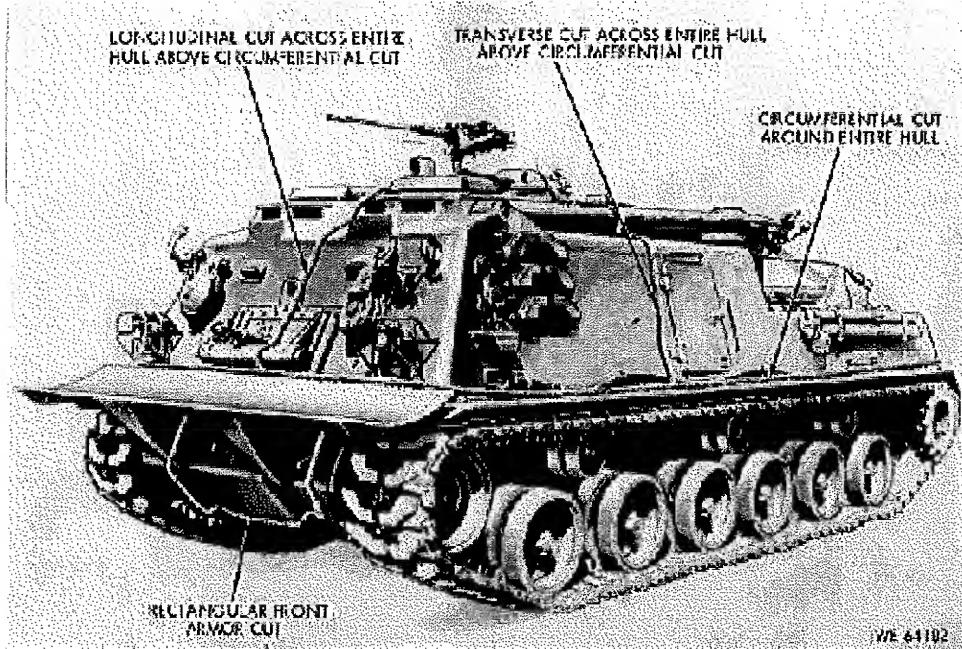


Figure 25. Tank Recovery Vehicles



- (b) A rectangular section of the hull front armor plate, starting at the circumferential cut and extending to the floor line, shall be removed. The width of the section shall be determined by making the widest cut possible without affecting the suspension.

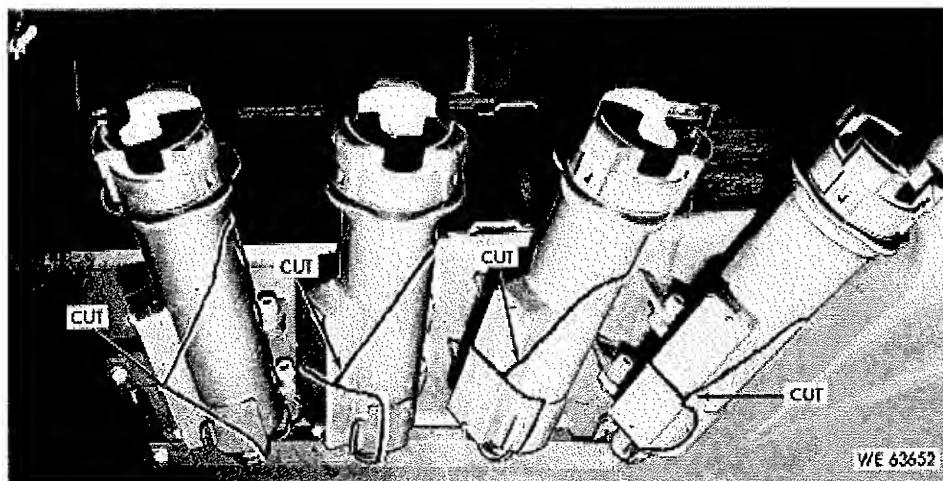
(c) The bottom section, including the chassis, shall be cut into four sections.

(5) Turret Rings. Turret rings shall be cut in half utilizing a cutting tip that displaces 1/2 inch of metal at a minimum.

(6) Hard Targets. See the Appendix to Enclosure 4 for procedures for special processing.

(7) Grenade Projector Mounts. Grenade projector mounts, as used in the M551 armored reconnaissance airborne vehicle, shall be demilitarized by cutting to destroy the firing solenoid (Figure 26).

Figure 26. Grenade Projector Mounts

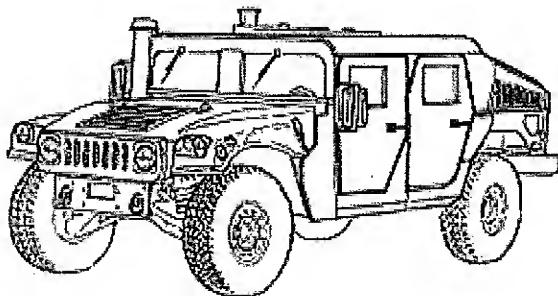


(8) Military Type Armed and Armored Vehicles. Military type armed and armored vehicles (i.e., integrated as opposed to being attached) shall be destroyed completely, paying attention to the key points (as described in paragraph 7.b), including turbochargers and superchargers, if installed. Armor shall be cut into 14-16 inch pieces. Armament shall be demilitarized as prescribed for Categories I and II. DEMIL of the main armament on combat vehicles may be accomplished on the vehicles or after removal from the vehicles.

b. DEMIL Code "C" Key Point Items (Figure 27). Some example of key points for vehicles, self-propelled guns, howitzers, mortars, military railway trains, and combat engineer vehicles include, but are not limited to, up-armor kits, AE, weapons, weapon fittings and/or mounts and special reinforcements for those mountings, communications equipment, ballistic glass, wiring and/or cable harnesses and assemblies, engines specifically designed, modified, or configured for the item, transmissions, deep water fording equipment (if installed), pneumatic tire casings of a kind designed to be bullet-proof or to run when deflated, tire inflation pressure control systems (operated from inside a moving vehicle), areas of armored protection for vital parts, (e.g., fuel tanks or vehicle cabs), identification plates, radioactive components, and other electronics. All

DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

Figure 27. Up-Armored Truck



c. DEMIL Code "E" Items. See existing instructions or request guidance using the DoD DEMIL Program Office contact information provided on the DoD DEMIL website at <https://demil.osd.mil>.

d. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

## 8. CATEGORY VIII. AIRCRAFT AND ASSOCIATED EQUIPMENT

a. DEMIL Code "D" Items. Armament (Figure 28) shall be demilitarized as specified for Categories I, II, and IV. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.

b. DEMIL Code "C" Key Point Items. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

### (1) Military Aircraft

(a) Aircraft (Figure 29 and Figure 30) that are specifically designed for military purposes shall be demilitarized as follows: at a minimum, cut or break completely through at least one lobe of the fuselage trifurcated horizontal and vertical stabilizer spar attachment fittings, on both the right and the left hand sides of the stabilizer carry-through spar assemblies. This demarcation of the prescribed DEMIL procedures is to ensure the aircraft is rendered unfit for flight. Cut or break completely through at least one lobe of the stabilizer bifurcated spar attachment fittings, on both the right and the left hand sides of the horizontal and vertical stabilizer wing carry-through spar assemblies. The area where the wing attaches and becomes a

part of the fuselage structure shall be mutilated in a manner that completely severs the wing spar and makes the aircraft unfit for flight. The empennage (tail assembly) shall be destroyed by mutilating the horizontal and vertical stabilizer attaching fittings area in such a manner as to make it unfit for flight. The fuselage shall be destroyed by severing an area (normally at the production break) between the wing and empennage. As an option, the airframe and fuselage may be destroyed by crushing, shredding or smelting. Some example of key points include, but are not limited to: aircraft fuselage, tail assembly, wing spar, armor, radomes, armament and armament provisions, missile ablative shell, impact detectors and circuitry, and missile guidance systems.

(b) Helicopters (Figure 31) specifically designed for military purposes shall be demilitarized by crushing, shredding, or smelting the entire airframe and fuselage, ensuring that the transmission mounts and supporting structural beams, engine deck in area of mounts, wing attaching mounts and support beam structure, and fuselage to tail boom attaching mounts and tail rotor gear box mounts have been destroyed. Notations in Figure 32 identify key points for DEMIL that need to be removed or destroyed.

## (2) Engines

(a) Turbojet, Turboprop, and Turbofan Engines. Remove the turbine wheel and shaft assembly from the engine and cut a segment of turbine wheel bucket spines containing two or more "fir trees." Sever the shaft at the wheel end bearing point. For multistage turbines, only the shaft and last stage turbine wheel need to be demilitarized. In cases where it is not economically practicable or feasible to remove the turbine wheel and shaft assembly from the engine, gain access to them by removing or cutting a hole in the shroud.

(b) Ramjet, Pulsejet, and Scramjet Engines. Some examples of key points include, but are not limited to, ignition system, fuel system (including the variable area nozzles and/or fuel spray systems), and engine mounting fittings.

(c) Rocket Engines. Some examples of key points include, but are not limited to, thrust chamber, turbine pump, balanced material orifices, gas generator (when used) and engine mounting fittings.

(3) Non-Expansive Balloons. Specific instructions and technical guidance for DEMIL shall be furnished by the Commander, Naval Air Systems Command, 47123 Buse Road, Building 2272 Suite 540, Patuxent River, MD 20670, upon request.

c. DEMIL Code "G" Items. Pylons and ejector/release racks shall be demilitarized as shown in Figure 32. Technical instructions shall be furnished by the Military Services having overall knowledge and responsibility for disposal of the material.

d. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

Figure 28. 7.62mm Machine Gun - 40mm Grenade Launcher Helicopter Armament Subsystem

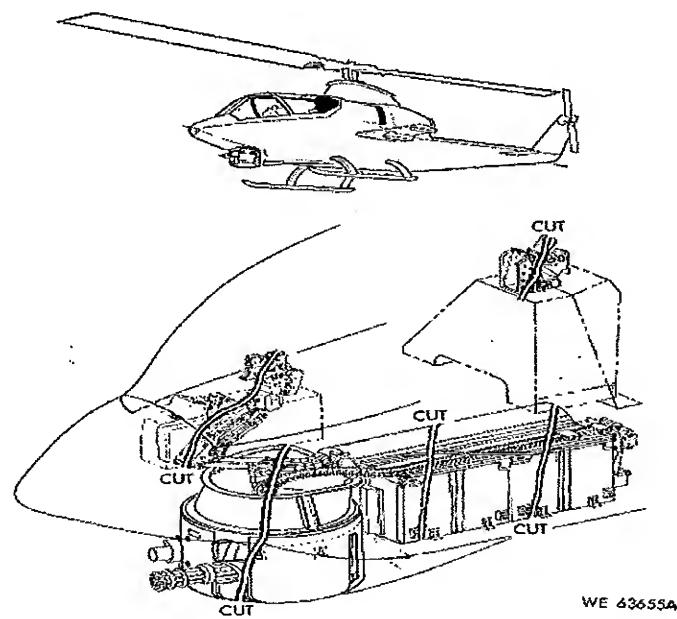


Figure 29. Single Engine Aircraft

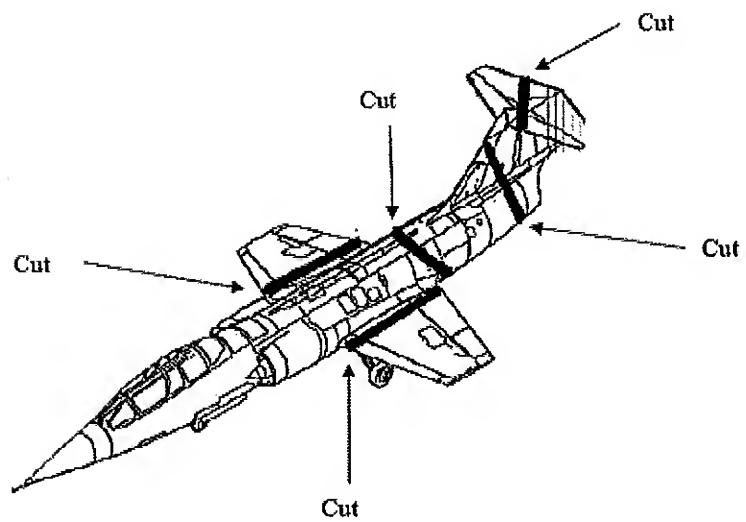


Figure 30. Multi-Engine Aircraft

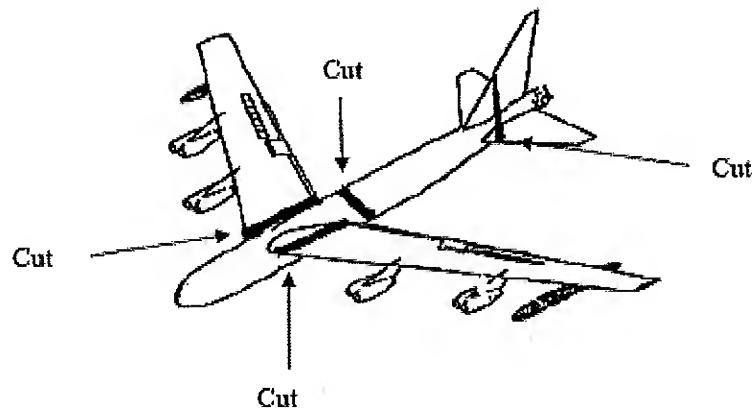


Figure 31. Attack Helicopter

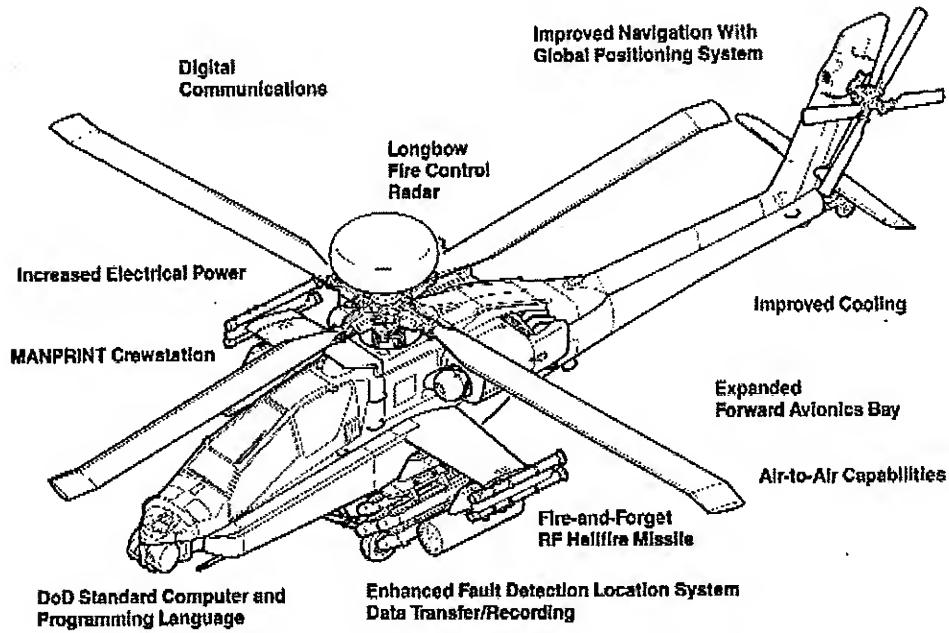
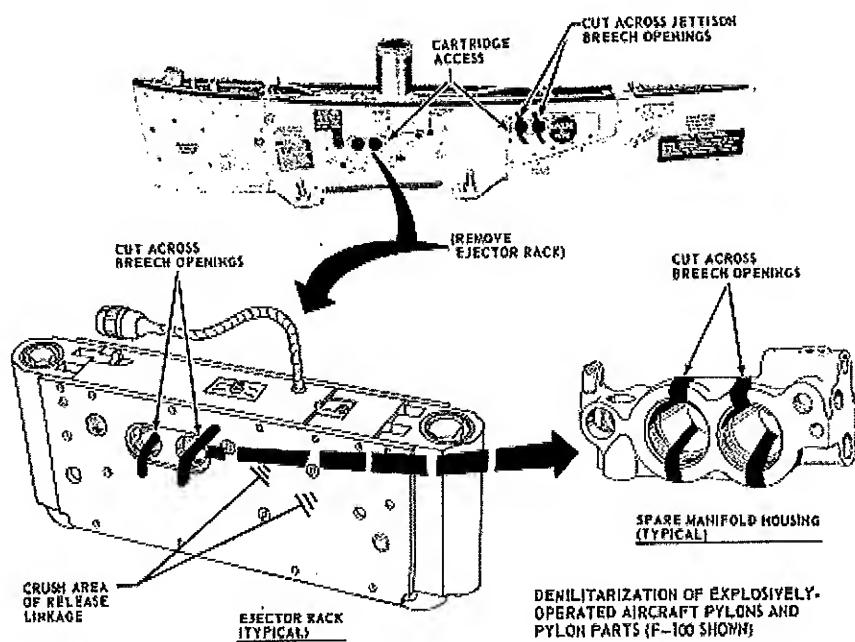


Figure 32. Aircraft Pylons and Pylon Parts

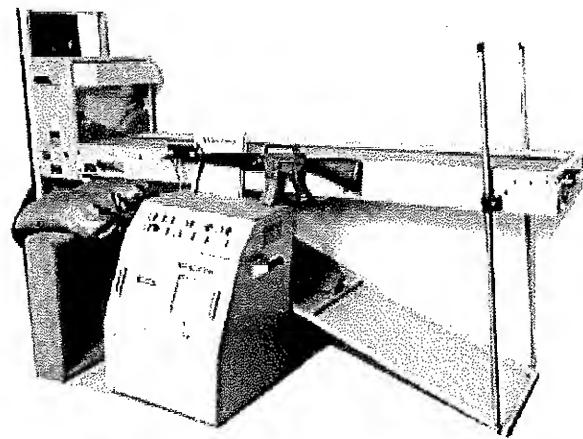
## 9. CATEGORY IX. MILITARY TRAINING EQUIPMENT AND TRAINING

- a. DEMIL Code "D" Items. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.
- b. DEMIL Code "C" Key Point Items. DEMIL-required property from other categories of this appendix that are contained in training equipment are key points of the training equipment and require DEMIL. In Figure 33, the helmet and vision device and in Figure 34, the M16A1/A2, the recoil assembly and cable, the display console, and the remote control box are all key point items that fall under other categories in this appendix. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.
- c. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

Figure 33. Aviation Combined Arms Tactical Trainer



Figure 34. Rifle Marksman Trainer Weaponeer



10. CATEGORY X. PROTECTIVE PERSONNEL EQUIPMENT AND SHELTERS

- a. DEMIL Code "D" Items. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.

b. DEMIL Code "C" Key Point Items. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

c. DEMIL Code "E" Items. See existing instructions or request guidance using the DoD DEMIL Program Office contact information provided on the DoD DEMIL website at <https://demil.osd.mil>.

d. DEMIL Code "F" Items. See Enclosure 5 of Volume 2 of this Manual regarding the method to obtain special instructions.

e. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

## 11. CATEGORY XI. MILITARY ELECTRONICS

### a. DEMIL Code "D" Items

(1) All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap. Demanufacturing of military electronics shall be accomplished as described in paragraph 3 of Enclosure 3 of this Volume.

(2) Items that incorporate a TEMPEST application and are specifically designed for military use, shall be completely destroyed to preclude restoration as an item for its original function (this includes both entire end items and individual components, as applicable). If the TEMPEST application is to a commercially available item, the turn-in activity shall sanitize the equipment of all classified and/or sensitive data and software prior to turn-in to the disposal activity. The turn-in document shall be annotated that the item has TEMPEST application and has been sanitized prior to turn-in. These items shall then be considered Commerce Control List Items (CCLI) and incorporate all appropriate controls.

b. DEMIL Code "C" Key Point Items. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items. Demanufacturing of military electronics shall be accomplished as described in paragraph 3 of Enclosure 3 of this Volume.

c. DEMIL Code "F" Items. See Enclosure 5 of Volume 2 of this Manual regarding the method to obtain special instructions.

d. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing,

burning, neutralizing, etc. Demanufacturing of military electronics shall be accomplished as described in paragraph 3 of Enclosure 3 of this Volume.

**12. CATEGORY XII. FIRE CONTROL, RANGE FINDER, OPTICAL AND GUIDANCE, AND CONTROL EQUIPMENT.** Any electronic components within this category shall be processed as in Category XI.

a. DEMIL Code "D" Items. Ensure that all lens or other optical components are completely destroyed. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.

b. DEMIL Code "C" Key Point Items. Cutting, crushing, breaking, or melting IR nightsighting and viewing equipment to the degree required to preclude repair or restoration to original intended use. Personnel engaged in DEMIL of this material should be aware of possible presence of self-luminous radioactive sights and coatings on certain optics. DEMIL shall be performed only in accordance with procedures approved by local safety personnel. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

c. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

**13. CATEGORY XIII. AUXILIARY MILITARY EQUIPMENT**

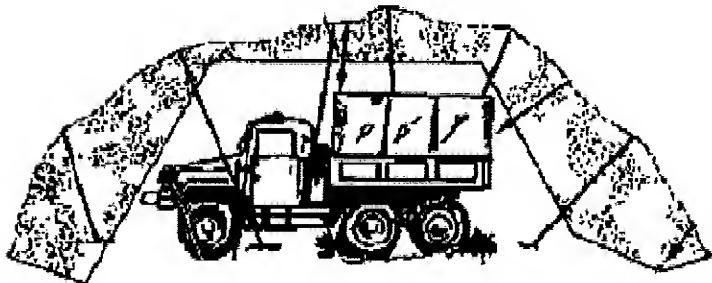
a. DEMIL Code "D" Items. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.

(1) Armor Modules (Ceramic and/or Composite) and Armored Brackets

- (a) Break the armor module external fabric and internal material into smaller pieces.
- (b) After completing this preliminary crushing, separate the armor module metal components and dispose of the metal components as scrap.
- (c) Process remaining armor module into unrecognizable rubble and/or particles.

(2) Specialized Camouflage Netting. Specialized camouflage netting as shown in Figure 35 shall be demilitarized by cutting into pieces no bigger than 4 x 4 inches, shredding, burning, or by burying in a Government-approved landfill.

Figure 35. Specialized Camouflage Netting



b. DEMIL Code "C" Key Point Items. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

c. DEMIL Code "G" Items. Technical instructions shall be furnished by the Military Services having overall knowledge and responsibility for disposal of the material.

d. DEMIL Code "F" Items. See Enclosure 5 of Volume 2 of this Manual regarding the method to obtain special instructions.

e. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

**14. CATEGORY XIV. TOXICOLOGICAL AGENTS, INCLUDING CHEMICAL AGENTS, BIOLOGICAL AGENTS, AND ASSOCIATED EQUIPMENT**

a. DEMIL Code "D" Items. M8 and M9 Chemical defense paper DEMIL may be accomplished by methods such as shredding, incineration, or burying in a landfill. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.

b. DEMIL Code "C" Key Point Items. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

c. DEMIL Code "G" Items. Disposal of chemical weapons and materials is accomplished by the U.S. Army Chemical Materials Agency (CMA). (See <http://www.cma.army.mil> for additional information related to the CMA). Disposal of chemical, biological, radiological, and

nuclear-defense equipment throughout the DoD is accomplished by the Joint Equipment Assessment Program (JEAP). (See <http://www.jpeocbd.osd.mil/packs/Default.aspx?pg=60> for additional information related to the JEAP).

d. DEMIL Code “F” Items. See Enclosure 5 of Volume 2 of this Manual regarding the method to obtain special instructions.

e. DEMIL Code “B” Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

## 15. CATEGORY XV. SPACECRAFT SYSTEMS AND ASSOCIATED EQUIPMENT

a. DEMIL Code “D” Items. All DEMIL code “D” items such as shown in Figure 36 shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use or for identification and association of related parts.

b. DEMIL Code “C” Key Point Items. All DEMIL code “C” items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code “D” items. These may include many of the key points identified in Figure 37.

c. DEMIL Code “B” Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

Figure 36. Satellite Signals Navigation Set

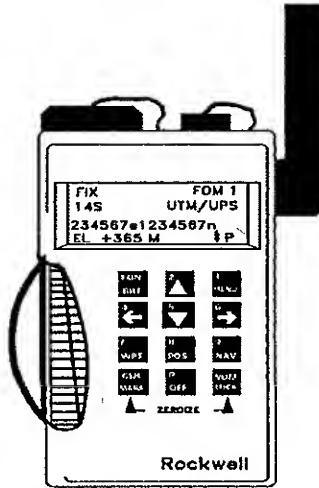
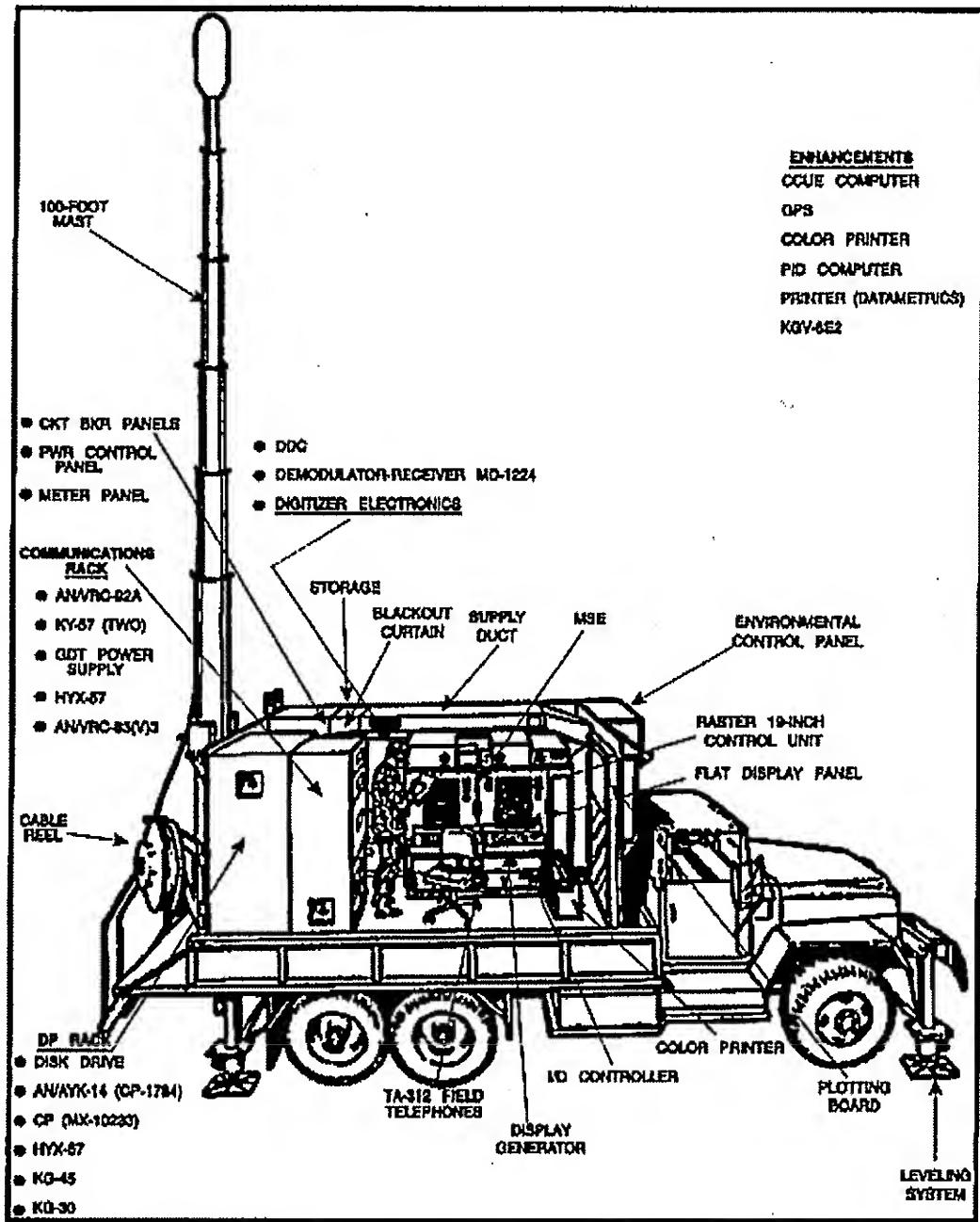


Figure 37. Interim Ground Station Module16. CATEGORY XVI. NUCLEAR WEAPONS, DESIGN AND TESTING RELATED ITEMS

- a. DEMIL Code "D" Items. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item

or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.

b. DEMIL Code "C" Key Point Items. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

c. DEMIL Code "F" Items. See Enclosure 5 of Volume 2 of this Manual regarding the method to obtain special instructions.

d. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

17. CATEGORY XVII. CLASSIFIED ARTICLES, TECHNICAL DATA AND DEFENSE SERVICES NOT OTHERWISE ENUMERATED. See Enclosure 5 of Volume 2 of this Manual for information related to DEMIL code "P" items.

18. CATEGORY XVIII. DIRECTED ENERGY WEAPONS

a. DEMIL Code "D" Items. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.

b. DEMIL Code "C" Key Point Items. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

c. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

19. CATEGORY XIX. This category does not currently have any items assigned to it by the Department of State (DoS) and is designated as reserved.

20. CATEGORY XX. SUBMERSIBLE VESSELS, OCEANOGRAPHIC AND ASSOCIATED EQUIPMENT

a. DEMIL Code "D" Items. All DEMIL code "D" items shall be destroyed by cutting, burning, breaking, crushing, etc., as appropriate to preclude restoration for further use as an item

or for identification and association of related parts. It is preferable to DEMIL all items to the level of scrap.

b. DEMIL Code "C" Key Point Items. All DEMIL code "C" items shall have the DEMIL required key points removed or destroyed in place. These key points themselves are assigned or treated as DEMIL code "D" items.

c. DEMIL Code "B" Items. MUT to the point of scrap worldwide to ensure items are unfit for their intended purpose by cutting, tearing, scratching, crushing, breaking, punching, shearing, burning, neutralizing, etc.

21. CATEGORY XXI. MISCELLANEOUS ARTICLES. See Table 23 of Volume 2 of this Manual for information related to this category.

ENCLOSURE 4DISPOSITION

1. INTRODUCTION. DEMIL requirements are accomplished in conjunction with disposition decisions. (See the appendix to this enclosure for types of property that have special processing considerations). More information on turn-in procedures as well as disposition requirements is specified in Reference (f).

2. REPORTING EXCESS PROPERTY

a. Materiel Excess Property Identification and Screening. Property needs to be positively identified using resources such as property accountability records, Federal Logistics Information System Web Inquiry (WebFLIS), and Federal Logistics Data (FEDLOG). (See ~~DoD 4140.1 R~~ DoD Manual 4140.01 (Reference (o)) and DoD 4000.25-1-M Defense Logistics Manual 4000.25-1 (Reference (p)) for materiel returns.) In addition, internal Military Department screening must be accomplished before an excess determination can be made.

b. Property DLA Disposition Services Does Not Physically Accept. DLA Disposition Services does not accept:

(1) DEMIL code "G" items unless certified as material documented as safe (MDAS) per the sample format in Figure 38.

(2) Items without an inert certificate as shown in the sample format in Figure 39. These items include, but are not limited to:

(a) Small Arms and Light Weapons (complete weapon)

(b) Barrel assembly and upper receiver

(c) Ammunition pouches/ outer tactical vests/individual load-bearing equipment/modular lightweight load carrying equipment (MOLLE)

(d) Ammunition magazines and clips

(e) Bandoleers and ammunition belts

(3) DEMIL code "P" items without DEMIL and declassification certificates per Figures 1 and 2.

**Figure 38. Sample Format of a Material Documented As Safe (MDAS) Certificate**

Title:	<b>Material Documented As Safe (MDAS) Certificate</b>
<b>Requirements:</b>	The explosives safety status of material potentially presenting an explosive hazard (MPPEH) shall be determined by one of two methods: (a) 100-percent visual inspection and an independent 100-percent re-inspection by qualified personnel or (b) processing by a DoD Explosives Safety Board (DDESB)-approved method with appropriate post-processing inspection (e.g., sampling, etc.) of the material. A certification/verification statement as shown shall be signed and dated by a DoD contracted person or a Government employee. This documentation is only valid if the material listed is properly segregated and secured, and the chain-of-custody is maintained until the material's release from DoD control.
Disposal Turn-In Document:	QTY:
National Stock Number or Description:	
<b>Certification Statement:</b>	
The material listed on this form has been inspected or processed by DDESB-approved means, as required by DoD policy, and to the best of my knowledge and belief does not pose an explosive hazard.	
Signature: _____	
Date _____	
Printed Name/Position (Grade/Rank): _____	
Organization and Address: _____	
Phone (COM/DSN/FAX)/E-Mail Address: _____ =====	
Signature: _____	
Date _____	
Printed Name/Position (Grade/Rank): _____	
Organization and Address: _____	
Phone (COM/DSN/FAX)/E-Mail Address: _____ =====	
Recommend this material be released for: (check all that apply)	
<input type="checkbox"/> Recycling <input type="checkbox"/> Unrestricted Use <input type="checkbox"/> Disposal <input type="checkbox"/> Other	
(Describe): _____	
<b>Reference:</b>	DoDI 4140.62, "Management and Disposition of Material Potentially Presenting an Explosive Hazard", current edition

Figure 39. Sample Format of an Inert Certificate

Title:	Inert Certificate
<b>Type of Property includes but is not limited to:</b>	<ol style="list-style-type: none"> <li>1. Small Arms and Light Weapons (complete weapon)</li> <li>2. Barrel assembly and upper receiver</li> <li>3. Ammunition pouches/ outer tactical vests/Individual load-bearing equipment/modular lightweight load carrying equipment</li> <li>4. Ammunition magazines and clips</li> <li>5. Bandoleers and ammunition belts</li> <li>6. Wholly Inert Items (e.g., Dummy munitions)</li> </ol>
<b>Requirements:</b>	The generating activity shall ensure that this property is properly inspected to determine the presence or absence of explosive hazards prior to referral to the DLA Disposition Services site or release from DoD control. The personnel certifying and verifying the inspection shall certify on the DD Form 1348-1A. The certification requires dual signatures (certifier, verifier) and printed full name, rank/rate, organization name and address, and phone number (commercial and DSN) of the personnel that certified and verified the inspection.
Disposal Turn-In Document (DTID):	QTY:
National Stock Number or Description:	
<b>Certification Statement:</b>	
The property associated with this DTID has been inspected by the Certifier and independently re-inspected by the Verifier and to the best of our knowledge is free of materiel potentially presenting an explosive hazard.	
Signature (Certifier): _____ Date _____	
Printed Name/Grade/Rank: _____	
Title: _____	
Phone (COM/DSN/FAX): _____	
Address: _____ =====	
Signature (Verifier): _____ Date _____	
Printed Name/Grade/Rank: _____	
Title: _____	
Phone (COM/DSN/FAX): _____	
Address: _____ =====	
<b>Reference:</b>	DoD Manual 4160.21-M, "Defense Materiel Disposition Manual," current edition

(4) DEMIL code "F" items without instructions. DEMIL code "F" instructions must be posted on the Army Electronic Product Support Network in accordance with Volume 2 of this Manual.

c. DoD Excess Reporting to General Services Administration (GSA). DEMIL codes "B", "C", "D", "E", "F", "G", "P", and sensitive "Q" personal property are ineligible for DoD excess reporting to the GSA in accordance with Reference (f), without demonstrated positive property accountability and a closed loop system that ensures return of such property to the DoD when no longer needed. This includes:

(1) Transfer screening of excess by other Federal agencies.

(2) Loans or donation screening of surplus by State agencies for surplus property and other eligible donation recipients.

d. Disposal Turn-In Document (DTID) (DD Form 1348-1A). For all material, the turn-in activity shall annotate each DTID with the DEMIL code or with a clear text statement for local stock numbers (LSNs). Disposal activities shall not accept any property unless the DD Form 1348-1A contains the official DEMIL code as recorded in the Federal Logistics Information System, such as FEDLOG or WebFLIS. Instructions on filling out the DTID are located in Reference (f).

e. Inaccurate DEMIL Code. Turn-in activities are responsible for reporting accurate DEMIL codes. Disposal activities shall challenge DEMIL codes that are considered or suspected to be in error according to Enclosure 4 to Volume 2 of this Manual.

f. Contractor Inventory. Contractors shall report DoD personal property in accordance with the terms and conditions of the accountable contract.

### 3. TYPES OF DISPOSITION

#### a. Reutilization

(1) DoD. DEMIL or mutilation (MUT) is not required for property that is reutilized within the DoD.

(2) DoD Special Programs. The title to DEMIL code "B", "C", "D", "E", "F", "G", and sensitive "Q" personal property shall not transfer to special programs. DoD personal property that requires DEMIL or MUT shall not be provided to special programs without demonstrated positive property accountability.

b. Transfer. DoD personal property that requires DEMIL or MUT is not eligible for release to transfer customers including the GSA without demonstrated positive property accountability. The DEMIL requirement is identified by an assigned DEMIL code of "C", "D", "E", "F", "G", or "P". The MUT requirement is identified by an assigned DEMIL code of "B" or a sensitive

DEMIL code of "Q." Other Federal agencies (OFAs) are considered transfer customers through the GSA. The title to DEMIL or MUT-required DoD personal property shall not transfer to OFAs. OFAs who obtain DoD personal property shall perpetuate the DEMIL codes in their property accountability records. Additionally, Federal and State agencies shall conform to Reference (f) as applicable.

c. Donation. Donation of DEMIL code "B," "C," "D," "E," "F," "G," and "P" and sensitive DEMIL code "Q" property is not authorized unless positive accountability, control, and end-use monitoring is established and verifiable through the DoD. Minimum and limited DEMIL of such items shall be accomplished to render the items unserviceable in the interest of public safety and shall preserve the intrinsic, historical, or display value of the property for use in approved museums. Instructions for limited DEMIL shall be provided by the donating agency. Final DEMIL must always be accomplished on partially demilitarized and modified items prior to final disposition. DoD property on the Commerce Control List (CCL) must conform to the requirements of DoDI 2030.08 (Reference (q)). The DoD Component making the donation is responsible for determining the current status of the items donated under these provisions on an annual basis. Unauthorized disposition or use by the recipient shall be immediately reported to the applicable security activity of the DoD Component in accordance with *DoDD 4140.1 DoDI 4140.01* (Reference (r)). (See Reference (f) for additional information.)

d. Service Educational Activities (SEA). An SEA, with the expressed approval of the school administration, GSA, and the DoD may only obtain DoD property that promotes the vocational program of the school. DEMIL code "B," "C," "D," "E," "F," "G," and "P" and sensitive DEMIL code "Q" property is not authorized.

e. Sales. Certified and verified DEMIL and MUT to the point of scrap needs to be accomplished as applicable prior to sale or as a condition of sale in accordance with this Manual.

#### 4. EXCHANGE AND/OR SALE OF DoD PERSONAL PROPERTY

a. The exchange and/or sale of Munitions List Item (MLI) and/or CCLI must comply with Reference (o), Reference (q), parts 101 and 102 of title 41, CFR (Reference (s)), and the provisions of this Manual.

b. The exchange and/or sale of MLI requiring DEMIL must be granted a waiver prior to release. Waiver of the DEMIL requirements of this Manual is not assumed and may be granted on a case-by-case basis by the DDPM. (See Volume 1 of this Manual for additional information regarding waivers.)

c. DoD USML or CCL personal property shall not be released to any person or entity that is ineligible to obtain a DoS, Department of Commerce (DoC), or Office of Foreign Assets Control export license.

5. **SPECIAL AND SECURITY ASSISTANCE PROGRAMS.** Special and security assistance programs are identified in Reference (f). DEMIL-required property shall not be released unless specifically authorized by the Department of Defense pursuant to legal authority

- a. **Foreign Military Sales.** Material released to foreign governments shall be in accordance with References (e), (f), (g), (q), and this Manual; and managed by the DSCA.
- b. **Law Enforcement Support.** Material released to law enforcement agencies, both State and Federal, shall be considered a loan only. This material, with the exception of released DEMIL code "A" property, shall be returned to the DoD for disposition when no longer required. (See sections 2576 and 2576a of Reference (h) for additional information.)
- c. **Firefighting Support.** Material released to State firefighting agencies through the DoD Firefighters Property Program is considered a loan. This material, with the exception of released DEMIL code "A" property, shall be returned to the DoD for final disposal. (See Reference (h) for additional information.)

6. **MATERIAL WITHOUT A NATIONAL STOCK NUMBER**

- a. **LSN DEMIL Codes and Clear Text Statement.** For other than supply system items and/or for LSN items, if the appropriate DEMIL codes for the items cannot be determined, turn-in activities shall enter on the DTID an appropriate clear text statement describing the DEMIL requirement and an appropriate and corresponding DEMIL code. For further instructions on assigning DEMIL codes, see Volume 2 of this Manual.
- b. **LSN Turn-in.** (See Reference (f) for requirements.)

Appendix

Property Requiring Special Processing

APPENDIX TO ENCLOSURE 4PROPERTY REQUIRING SPECIAL PROCESSING

1. AIRCRAFT. (See Reference (f) and Category VIII of the Appendix to Enclosure 3 for additional information related to aircraft.) Aircraft that require DEMIL shall not be reported to GSA for transfer, donation, or sale except as scrap. F-14 aircraft processing requires:

- a. Destruction of all excess F-14 unique items.
- b. A one-time reutilization of F-14 common items within the DoD only.
- c. Destruction of remaining F-14 common items after completion of the one-time reutilization.

2. AIRCRAFT PYLONS, FUEL TANKS, LAUNCHERS, AND EJECTOR/RELEASE RACKS. See Reference (f) and Category VIII of the Appendix to Enclosure 3 for relevant information.

3. AIRCRAFT SCRAP ALUMINUM. See Reference (f) and Category VIII of the Appendix to Enclosure 3 for relevant information.

4. AE. See Reference (n) and Volume 2 of this Manual for additional information regarding AE.

a. AE cannot be transferred to a DLA Disposition Services site until it has been inspected and certified as MDAS. Certification requirements are identified in Figure 38. See Reference (f) for information related to transferring material to a DLA Disposition Services site.

b. See related information in this appendix in section 23 for expended small arms cartridge casing (ESACC) and section 31 for material potentially presenting an explosive hazard (MPPEH).

5. ARMORED VEHICLE PERISCOPES. See Reference (f) and Categories VII and XII of the Appendix to Enclosure 3 for relevant information.

6. BARREL ASSEMBLY. See Reference (f) and Category I of the Appendix to Enclosure 3 for relevant information. These items require an inert certificate per Figure 39.

7. BATCH LOTS. DEMIL required property shall not be submitted in batch lots. DEMIL required items must be turned in as single line items.

8. CAMOUFLAGE NETTING. See Reference (f) and Category XIII of Enclosure 3 for relevant information.

9. CANISTER AND FILTER ELEMENTS FOR CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR EQUIPMENT, INDIVIDUAL PROTECTION. See Category XIV of the Appendix to Enclosure 3 for relevant information and, for CE/C2 CANISTERS, see Reference (f).

10. CANNON TUBES. (See Reference (f) and Category II of the Appendix to Enclosure 3 for relevant information.) These items require an inert certificate per Figure 39.

11. CHAFF. (See Reference (f) and Category XIII of the Appendix to Enclosure 3 for relevant information.) These items require an MDAS certificate per Figure 38.

12. CHEMICAL AGENT RESISTANT COATING. See Reference (f) and Category XIV of the Appendix to Enclosure 3 for relevant information.

13. CHEMICAL DEFENSE EQUIPMENT. See Reference (f) and Category XIV of the Appendix to Enclosure 3 for relevant information.

14. CHEMICAL DEFENSE PAPER, M8 AND M9 TYPES. See Reference (f) and Category XIV of the Appendix to Enclosure 3 for relevant information.

15. CHEMICAL WEAPONS. CMA safely stores and destroys aging chemical weapons while working toward the effective assessment, treatment, and ultimate elimination of the nation's chemical warfare materiel. (See <http://www.cma.army.mil>, and Category XIV of the Appendix to Enclosure 3 for relevant information.)

16. CLASSIFIED COMMUNICATIONS SECURITY ITEMS , CRYPTOLOGIC ITEMS, AND CONTROLLED CRYPTOGRAPHIC ITEMS (CCI). See Volume 2 of this Manual related to DEMIL code "P" items, table 61 of *DoD Manual 4100.39-M* (Reference (t)) for Controlled Inventory Item Codes, and Category XIII of the Appendix to Enclosure 3 for non-classified cryptologic items.

17. COMMUNICATION SHELTERS. See Reference (f) and Category X of the Appendix to Enclosure 3 for relevant information.

18. COMPOSITE FIBER/CARBON COMPOSITE FIBER MATERIEL/PROPERTY. See Reference (f), Category VIII of the Appendix to Enclosure 3 for aircraft, and Category X of the Appendix to Enclosure 3 for clothing and/or body armor.

19. CONTRACTOR INVENTORY. See Enclosure 3 for relevant information.

20. DISTRESS SIGNALING DEVICES. See Reference (f) and Category I of the Appendix to Enclosure 3 for relevant information.

21. EJECTION SEATS. (See Reference (f) and Category VIII of the Appendix to Enclosure 3 for relevant information.) These items require an MDAS certificate per Figure 38.

22. ELECTRON TUBES. See Reference (f) and Category XI of the Appendix to Enclosure 3 for relevant information.

23. ESACC. Cases up to .50 caliber (12.7mm), inclusive, shall be treated as non-sensitive DEMIL code "Q" subject to TSC. See Volume 2 of this Manual for information related to DEMIL code "Q." These items require an MDAS certificate per Figure 38. Also see section 4 of this appendix for AE and section 31 of this appendix for MPPEH related information.

24. FLIGHT SAFETY CRITICAL AIRCRAFT PARTS/CRITICAL SAFETY ITEM. See Reference (f) for relevant information.

25. GLOBAL POSITIONING SYSTEM. See Reference (f) and Category XV of the Appendix to Enclosure 3 for relevant information.

26. HARD TARGETS. Tanks, vehicles, aircraft, and other articles covered under various categories in Volume 2 of this Manual and utilized as hard targets, must be demilitarized in accordance with Volume 3 of this Manual. Damage sustained to an article used as a hard target does not necessarily constitute DEMIL. Destruction must, at a minimum, satisfy the provisions of the Appendix to Enclosure 3. These items require an MDAS certificate per Figure 38.

27. HELICOPTER BLADES AND TAIL ROTORS. See Reference (f) and Category VIII of the Appendix to Enclosure 3 for relevant information.

28. HELMETS, AIRCRAFT, AND COMBAT VEHICLE CREW. See Reference (f) and Category X of the Appendix to Enclosure 3 for relevant information.

29. HYDROPNEUMATIC RECOIL MECHANISM/HYDROPNEUMATIC EQUILIBRATOR. See Reference (f) and Category II of the Appendix to Enclosure 3 for relevant information.

30. MAPS, CHARTS, AND GEODESIC PRODUCTS. Maps, charts, and geodesic products may have LIMITED DISTRIBUTION controls. Such material shall be destroyed in accordance with DoDI 5030.59 (Reference (u)).

31. MPPEH

a. MPPEH is a designation for material that may contain explosive hazards and is addressed by Reference (m). Examples of MPPEH material are expended ammunition rounds that in an unexpended state were classified as DEMIL code "G" and munitions containers that are not DEMIL code "G" but could still hold an explosive item.

b. MPPEH cannot be transferred to a DLA Disposition Services site until it has been inspected in accordance with Reference (m), certified as MDAS per Figure 38, and assigned an LSN. See Reference (f) for information related to transferring material to DLA Disposition Services site.

c. See related information in this appendix in section 4 for AE and section 23 for ESACCs.

32. MILITARY COMBAT CLOTHING AND INDIVIDUAL EQUIPMENT. Excess military combat uniforms may require an inert certificate per Figure 39 and will be destroyed by incineration. (See Reference (f) and Category X of the Appendix to Enclosure 3 for relevant information.)

33. NAVY SHIPS

a. The Naval Sea Systems Command's Program Executive Office (PEO) Ships manages acquisition and complete life cycle support for all U.S. Navy non-nuclear surface ships. These ships range from combatants to amphibious ships to supply and replenishment cargo ships. For these and all other non-nuclear surface craft, PEO Ships maintains "cradle to grave" responsibility. At the end of a ship's life, PEO Ships manages formal decommissioning from the Fleet and, in some cases, transfers or sells ships to friendly foreign navies. When a ship is not

transferred or sold, PEO Ships manages its inactivation and safe disposition through the Navy Inactive Ships Program (PMS-333). (See <http://www.navsea.navy.mil/teamships/Inactiveships/default.aspx> and <http://acquisition.navy.mil/programs>.)

b. All U.S. Navy decommissioned nuclear submarines and carriers are disposed of by PEO Submarines and PEO Carriers respectively.

34. NIGHT VISION EQUIPMENT (NVE)

a. See Reference (f), export control classification numbers (ECCNs) 6A002, 6A003, 6E001, and 6E002 of Reference (k), and Category XII of the Appendix to Enclosure 3 for relevant information.

b. NVE containing low-level radioactive components, which are discussed in DoD 4715.6-R (Reference (v)), are not authorized for physical transfer to a DLA Disposition Services site. Disposal of NVE shall be managed according to guidance in Reference (f).

35. NUCLEAR PROPULSION PLANT MATERIEL. All matters pertaining to the Navy Nuclear propulsion plants are handled by the Director, Naval Nuclear Propulsion Program. (See Reference (f) and Categories VI and XX of the Appendix to Enclosure 3 for relevant information.)

36. NUCLEAR WEAPONS/ORDNANCE MATERIEL. See Reference (f) and Category XVI of the Appendix to Enclosure 3 for relevant information.

37. NUCLEAR WEAPONS RELATED MATERIEL (NWRM). See *USD(AT&L) the Under Secretary of Defense for Acquisition, Technology, and Logistics Memorandum* (Reference (w)) for relevant information on NWRM.

38. PARACHUTES (PERSONNEL AND CARGO). (See Reference (f) and Category VIII of the Appendix to Enclosure 3 for relevant information.) These items may require an MDAS certificate per Figure 38.

39. SCRAP. Intact or recognizable USML and/or CCLIs, components, and parts are not considered scrap. All USML and/or CCLIs must be rendered useless beyond repair, rehabilitation, or restoration to remove any defensive or offensive capability and any recognition characteristics of the item before being considered recyclable, waste, or discarded material.

**40. SA/LW**

a. DEMIL Centers designated by DLA Disposition Services are the preferred agents for the DEMIL of SA/LW in accordance with Volume 3 of this Manual when directed and authorized by the primary inventory control activity (PICA). The PICA may authorize the secondary inventory control activity to DEMIL SA/LW and turn-in DEMIL residue to the DLA Disposition Services with the DEMIL certificate. These items require an inert certificate per Figure 39. (See chapter 5 of Reference (o), *DOD Manual 5100.76-M* (Reference (x)), and section 53 of title 26, United States Code (Reference (y)) for related information.)

b. SA/LW processing must comply with the physical security requirements of Reference (x), part II of DTR 4500.9-R (Reference (z)) and the DoD Small Arms/Light Weapons Serialization Program as described in chapter 12 of ~~DoD 4000.25-2 M Defense Logistics Manual 4000.25-2~~ (Reference (aa)).

**41. SMOKE POTS (EXPENDED)**. (See Reference (f) and Category V of the Appendix to Enclosure 3 for relevant information.) These items require an MDAS certificate per Figure 38.

**42. SPECIAL TOOLING AND SPECIAL TEST EQUIPMENT (ST/STE)**. (See the Appendix to Enclosure 3 for relevant information.) The DoD may screen for reutilization of material, equipment, and ST/STE that is MLI within the DoD in accordance with subpart 45.602 of Reference (i).

a. ST/STE typically does not receive a NSN so the contractor must provide clear detailed identification of ST/STE when reporting on inventory disposal schedules.

b. Unclear identification of ST/STE may result in the unauthorized release or abandonment of sensitive property. Plant clearance officers will not accept inventory disposal schedules that do not contain clear identification and will return them to the contractor for correction.

**43. STARTER GUNS**. (See Reference (f), Category I of the Appendix to Enclosure 3, and part 478 of title 27, CFR (Reference (ab) for relevant information.) These items require an inert certificate per Figure 39.

**44. STRATEGIC AND CRITICAL MATERIELS**. See Reference (f) for relevant information.

**45. SUBMARINE ESCAPE APPLIANCES**. See Reference (f) and Category VI of the Appendix to Enclosure 3 for relevant information.

46. SUBSAFE PROPERTY. See Reference (f) and Category VI of the Appendix to Enclosure 3 for relevant information.

47. SURVIVAL AND PROTECTIVE EQUIPMENT. See Reference (f) and Category X of the Appendix to Enclosure 3 for relevant information.

48. TECHNICAL PUBLICATIONS. See Reference (f) and all categories in the Appendix to Enclosure 3 for relevant information.

49. TEMPEST TECHNOLOGY ITEMS/EQUIPMENT. See Reference (f) and Category XI of the Appendix to Enclosure 3 for relevant information.

50. TRAINING EQUIPMENT. (See Hard Targets in section 26 of this appendix, and Category IX of the Appendix to Enclosure 3 for relevant information.) Additional information on training aids and target requirements can be found in Reference (f).

51. UNIFORM CLOTHING STORES AND MILITARY EXCHANGE SERVICE STORES. Uniform clothing stores and military exchange service stores shall not be allowed to sell DEMIL required property.

52. VEHICLES. See Reference (f), Category VII and Category XIII of the Appendix to Enclosure 3 for armor, and ECCN 9A018 of Reference (k).

## GLOSSARY

### PART I. ABBREVIATIONS AND ACRONYMS

AE	ammunition and explosives
CCI	Controlled Cryptographic Items
CCL	Commerce Control List
CCLI	Commerce Control List Item
CMA	Chemical Materials Agency
CFR	Code of Federal Regulations
DDESB	DoD Explosives Safety Board
DDPM	DoD DEMIL Program Manager
DEMIL	Demilitarization
DoDD	DoD Directive
DLA	Defense Logistics Agency
DoC	Department of Commerce
DoDI	DoD Instruction
DSCA	Defense Security Cooperation Agency
DTID	disposal turn-in document
ECCN	export control classification numbers
ESACC	expended small arms cartridge casing
FEDLOG	Federal Logistics Data
GSA	General Services Administration
IR	infrared
JEAP	Joint Equipment Assessment Program
LSN	local stock number
MLI	Munitions List Item
MDAS	material documented as safe
MOLLE	Modular Lightweight Load Carrying Equipment
MPPEH	material potentially presenting an explosive hazard
MUT	mutilation
NSN	National Stock Number
NVE	night vision equipment
NWRM	nuclear weapons related materiel

OFA	other Federal agencies
PEO	Program Executive Office
PICA	Primary Inventory Control Activity
SA/LW	small arms and light weapons
SCO	Security Cooperation Organization
SEA	Service Educational Activities
SMCA	Single Manager for Conventional Ammunition
ST/STE	special tooling and special test equipment
TSC	Trade Security Controls
USD(AT&L)	<del>Under Secretary of Defense for Acquisition, Technology, and Logistics</del>
USML	U.S. Munitions List
WebFLIS	Federal Logistics Information System Web Inquiry

## PART II. DEFINITIONS

Unless otherwise noted, these terms and their definitions are for the purposes of this Volume.

AE. Defined in DoD 6055.09-M (Reference (ac)).

biological agents. Defined in ~~Joint Publication 1-02 the DoD Dictionary of Military and Associated Terms~~ (Reference (ad)).

CCI. A secure telecommunications or information handling equipment ancillary device, or associated cryptographic component, that is unclassified but controlled. Equipments and components so designated bear the designator “Controlled Cryptographic Item” or “CCI.”

CCL. A list of dual-use items under the export control jurisdiction of the BIS, U.S. DoC. See part 772 of Reference (k).

CCLI. An item or material found on the CCL. See part 774 of Reference (k).

chemical agents. Defined in Reference (ad).

contractor inventory. Contractor inventory includes any MLI and CCLI property acquired by and in the possession of a contractor or subcontractor under a contract for which title is vested in the Government and which exceeds the amounts needed to complete full performance under the entire contract.

conventional ammunition. Defined in Reference (g).

DEMIL. The act of eliminating the functional capabilities and/or inherent military design features from DoD personal property. Methods and degree range from removal and destruction of critical features to total destruction by cutting, crushing, shredding, melting, burning, etc. DEMIL is required to prevent property from being used for its originally intended purpose and to prevent the release of inherent design information that could be used against the United States. DEMIL applies to material in serviceable and unserviceable condition.

DEMIL Code. A code assigned to DoD personal property. It indicates the degree of required physical destruction, identifies items requiring specialized capabilities or procedures, and identifies items that do not require DEMIL but may require TSC. It is used throughout the life-cycle to identify control requirements required before release of DoD personal property from DoD control.

disposal. Defined in Reference (f).

DoD excess. Defined in Reference (f).

domestic excess. Defined in Reference (f).

excess personal property. Defined in Reference (f).

foreign excess personal property. Defined in Reference (f).

key points (for DEMIL). The parts, components, alignment points, attachment fittings or areas which, when demilitarized, cannot feasibly be repaired, restored, replaced, improvised or commercially procured and which are necessary factors in restoring the next higher assembly to design capability.

MDAS. Defined in Reference (m).

MPPEH. Defined in Reference (m).

NWRM. Defined in the Reference (w).

SCO. Defined in Reference (e).

scrap. Defined in Reference (q).

small arms. Defined in Reference (f).

technical data. Defined in parts 120-130 of title 22, CFR (Reference (ae)).

TEMPEST. Defined in Reference (ad).

TSC. Defined in Reference (q).

wholly inert. Defined in Reference (ac).



## DOD MANUAL 4100.39

### FEDERAL LOGISTICS INFORMATION SYSTEM (FLIS) PROCEDURES

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**Originating Component:** Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics

**Effective:** March 8, 2017

*Change 1 Effective:* October 5, 2017

**Releasability:** Cleared for public release. Available on the DoD Issuances Website at <http://www.dtic.mil/whs/directives>. Directives Division Website at <http://www.esd.whs.mil/DD>.

**Reissues and Cancels:** DoD Manual 4100.39, "Federal Logistics Information System (FLIS) Procedures Manual," date varies by volume

**Approved by:** Kristin K. French, Acting Assistant Secretary of Defense for Logistics and Materiel Readiness

*Change 1 Approved by:* Kristin K. French, Acting Assistant Secretary of Defense for Logistics and Materiel Readiness

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**Purpose:** In accordance with the authority in DoD Directive 5134.12, policy in DoD Instruction (DoDI) 4140.01, and guidance in DoD Manual (DoDM) 4140.01, this issuance:

- Provides procedures for maintaining and using the Federal Catalog System (FCS).
- Assigns responsibilities associated with maintaining and using FCS and FLIS.
- Provides procedures on cataloging supply items.
- *Authorizes maintenance of the FLIS technical procedures (previously contained in the volumes of the previous version of this manual) by the Defense Logistics Agency on their website at <http://www.dla.mil/HQ/InformationOperations/Offers/Services/TrainingandReference>.*

## TABLE OF CONTENTS

SECTION 1: GENERAL ISSUANCE INFORMATION .....	4
1.1. Applicability. ....	4
SECTION 2: RESPONSIBILITIES.....	5
2.1. Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD(L&MR)) ..	5
2.2. Director, Defense Logistics Agency (DLA). ....	5
2.3. Director, Defense Threat Reduction Agency (DTRA). ....	6
2.4. DoD Component Heads and Participating Agency Administrators. ....	6
SECTION 3: PROCEDURES .....	8
3.1. Overview.....	8
3.2. General Procedures. ....	8
a. Item of Production and Item of Supply.....	8
b. Item Identification.....	10
c. Item Naming Conventions. ....	10
d. FSC. ....	11
e. NSNs. ....	11
f. Stock Numbering Criteria.....	12
3.3. Data Recording and Maintenance.....	13
a. Data Recorded and Maintained.....	13
b. Data Input and Output.....	13
c. IMMs.....	13
d. Data Revisions and Updates. ....	14
e. Logistics Reference Numbers. ....	14
f. IEC.....	15
g. Technical Data Requirements. ....	15
h. CMD. ....	15
i. FCS Change Collaboration.....	16
3.4. Data Dissemination.....	18
3.5. DTRA Data Dissemination to DLA.....	18
3.6. Cataloging Tools and Publications. ....	19
3.7. Quality Assurance and Quality Control. ....	19
a. Quality Control.....	19
b. Quality Assurance.....	20
3.8. International Cataloging Procedures.....	20
3.9. Output Distribution.....	22
3.10. Fixed Length Record Formats .....	31
3.11. Sequence Processing.....	31
a. Dynamic Scheduling.....	31
b. Fixed Interval Scheduling.....	32
3.12. Suspense File. ....	32
3.13. Unprocessable Transactions.....	32
3.14. Error Processing.....	33
3.15. FLIS Processing Malfunction. ....	34
3.16. Catalog Tools Process.....	35

a. MOE Rule File Maintenance.....	35
b. FSC Table.....	36
c. FSC Management Data Maintenance.....	36
d. TIR OE Master File.....	36
e. Catalog Tools Master Freight Table Maintenance.....	37
3.17. FLIS Mass Change Process.....	37
3.18. FLIS Mass Data Retrieval.....	40
3.19. Reports Generator.....	41
3.20. Record Establishment and Maintenance Actions.....	42
3.21. FLIS CRs.....	43
a. Assigned Areas.....	43
b. Procedural Changes.....	43
c. Preparation and Processing of CRs.....	44
d. Status Reports.....	46
e. Guidance for Preparing CRs.....	46
3.22. Interface Test Capability.....	49
GLOSSARY .....	51
G.1. Acronyms.....	51
G.2. Definitions.....	52
REFERENCES .....	56

## TABLES

Table 1. Common Causes of Unprocessable Transactions.....	33
Table 2. MOE Rule Output DICs .....	35
Table 3. FSC Management Output DICs.....	36
Table 4. FLIS Output DICs.....	37
Table 5. Data Elements for Mass Changes in FLIS.....	39
Table 6. Functional Areas for Mass Changes in FLIS .....	39

## SECTION 1: GENERAL ISSUANCE INFORMATION

**1.1. APPLICABILITY.** This issuance applies to:

- a. OSD, the Military Departments (including the Coast Guard at all times, including when it is a Service in the Department of Homeland Security by agreement with that Department), the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this issuance as the “DoD Components”).
- b. Use of the FCS by federal agency organizations participating with the DoD Components in the Federal Catalog Program (FCP), for a uniform system of item identification; but only when and to the extent they adopt the terms of this issuance. The federal agency organizations described in this paragraph are referred to collectively in this issuance as “participating agencies.”
- c. Use of the FCS by North Atlantic Treaty Organization (NATO) member nations and other foreign governments and agencies participating with the DoD Components in the FCP pursuant to NATO Standardization Agreement (STANAG) 3150, for a uniform system of item identification; but only when and to the extent they adopt the terms of this issuance. The NATO member nations and other foreign governments and agencies described in this paragraph are referred to collectively in this issuance as “participating countries.”

## SECTION 2: RESPONSIBILITIES

**2.1. ASSISTANT SECRETARY OF DEFENSE FOR LOGISTICS AND MATERIEL READINESS (ASD(L&MR)).** Under the authority, direction, and control of the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)), the ASD(L&MR):

- a. Establishes guidance and standards for item identification among the DoD Components.
- b. Develops policy and provides guidance, oversight, and direct implementation of compliance with the FCP.
- c. Designates a FLIS functional manager, who will ensure that related policy and procedures manuals affected by FLIS changes are revised as appropriate.

**2.2. DIRECTOR, DEFENSE LOGISTICS AGENCY (DLA).** Under the authority, direction, and control of the USD(AT&L), through the ASD(L&MR), and in addition to the responsibilities in Paragraph 2.4., the Director, DLA:

- a. Functions as the DoD FCP administrator.
- b. Administers and manages the operation of FLIS as the single source of federal cataloging and related logistics management data to support the needs of DoD Components, participating agencies, and participating countries (referred to in this issuance as "participating activities").
  - (1) Ensures that the FLIS is administered and managed using cybersecurity best practices, in accordance with DoDI 8500.01 and DoDI 8530.01.
  - (2) Ensures that the development, compilation, and publication of FCS tools and publications are done using cybersecurity best practices, as described in DoDI 8500.01 and DoDI 8530.01.
  - (3) Administers the website with the FLIS technical procedures at <http://www.dla.mil/HQ/InformationOperations/Offers/Services/TrainingandReference>, referred to in this issuance as the DLA website.
- c. Establishes and oversees the development, compilation, and publication of FCS tools and publications.
- d. Functions as the single DoD catalog data submitter for Federal Supply Classification (FSC) requests for all assigned supply classes when Category A single submitter criteria applies.
- e. Assigns a definitive order of use code to each item in the interchangeability and substitutability (I&S) family to facilitate I&S determinations.
- f. Manages the annual DoD stock fund price change.

g. Oversees the management of the National Codification Bureau (NCB) for the United States.

h. Establishes and maintains the application of the indicator codes of nuclear weapons-related material.

**2.3. DIRECTOR, DEFENSE THREAT REDUCTION AGENCY (DTRA).** Under the authority, direction, and control of the USD(AT&L), through the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, and in addition to the responsibilities in Paragraph 2.4., the Director, DTRA:

a. Maintains and oversees the operation of the Nuclear Ordnance Cataloging Office (NOCO) for the management, operation, and logistic support of nuclear ordnance items of supply.

b. Operates and maintains the Nuclear Inventory Management and Cataloging System classified database of record in support of the FCP for the DoD integrated material management of the Department of Energy's special designed and produced nuclear weapons, including:

(1) Items specially designed by the Military Services.

(2) Commercial items controlled by the Military Services.

c. Manages the development of cataloging, standardization, and supply publications applicable solely to the identification of items designed specifically for use in the nuclear ordnance field.

d. Executes cataloging responsibility for nuclear weapons-related material program establishment of national item identification numbers (NIINs) populating the Nuclear Inventory Management and Cataloging System for controlled inventory and accountability in accordance with DoDI 4140.01.

**2.4. DOD COMPONENT HEADS AND PARTICIPATING AGENCY ADMINISTRATORS.** The DoD Component heads and participating agency administrators:

a. Ensure that appropriate provisioning and pre-procurement requirements and screening are applied to all items being recommended or considered for procurement and that screening requests are submitted directly to DLA Logistics Information Services.

b. Ensure that the Provisioning Screening Master Address Table (PSMAT) in FLIS is updated and purged in accordance with current contractor access requirements.

c. Provide technical information needed to catalog an item to the DLA Logistics Information Services.

d. When preparing, submitting, processing, and retaining cataloging data and automated inputs and outputs:

- (1) Institute quality control programs and establish required quality levels for each inspection step.
  - (2) Provide training for personnel involved in the FCP. Training courses and other reference material are available through DLA website.
  - (3) Jointly develop and apply general application standards, edits, and validations for the FCS.
  - (4) Establish and maintain a jointly developed quality level for the FCS.
  - (5) Maintain auditability of data changes within the FCS.
  - (6) Define items of supply in the broadest possible terms:
    - (a) To ensure identification consistent with logistics requirements.
    - (b) Considering technical aspects and logistics responsibilities.
- e. Designate an official to serve as the integrated materiel manager (IMM) for each item for which the DoD Component or participating agency is assigned wholesale integrated materiel management responsibility in accordance with DoDI 4140.01, DoD 4140.26-M, and DoDM 4140.68.

## SECTION 3: PROCEDURES

### 3.1. OVERVIEW. Participating activities:

- a. Use the procedures in this issuance for collecting, storing, processing, and providing item-related logistics information with FLIS.
- b. Use FLIS in the acquisition, storage, distribution, maintenance, and disposition of military materiel and civilian products for government use.
- c. Use FLIS as an open-ended information management system that can be expanded to accommodate additional logistics data management concepts and applications as needed.
- d. Interface with FLIS to input and extract information in major logistics areas such as:
  - (1) Supply management.
  - (2) Item identification.
  - (3) Tailored data products.
  - (4) DoD I&S family data.
  - (5) Standardization.
  - (6) Commercial and government entity (CAGE) code management.
- e. Use FLIS:
  - (1) As the central repository of logistics management information.
  - (2) To find data for item management.
  - (3) For the information in the central repository needed to manage items.
  - (4) To identify the justifiable requirements of materiel managers at all levels.
  - (5) As a world-wide network designed to transmit logistics data as transactions occur, on a self-addressing basis, from and to all applicable management levels of the United States and participating countries.
  - (6) To research the standard coding of data elements common to FLIS and related logistics programs.

### 3.2. GENERAL PROCEDURES.

#### a. Item of Production and Item of Supply.

(1) Item of Production. The submitting activity will appropriately identify an item of production as a part, piece, object, equipment, or material produced by a manufacturer, grouped within a manufacturer's identifying number, and conforming to the same engineering drawing, standard, specification, and inspection.

(2) Item of Supply. DoD Components will appropriately identify an item of supply as:

(a) A single item of production.

(b) Two or more items of production that are functionally interchangeable or that may be substituted for the same purpose and that are comparable in terms of use.

(c) An item with more stringent characteristics (a selection of closer tolerance, specific characteristics, finer quality) than the normal item of production, so that in some particular uses only the more stringent version of the item may be usable but in other uses the normal or the more stringent version may be used interchangeably.

(d) A modification (accomplished by the user or at the request of the user) of a normal item of production.

(3) Determination.

(a) Each participating activity will determine and justify its items of supply in terms of technical considerations and logistics responsibilities. In accordance with this principle, an activity will define its items of supply in the broadest possible terms that will assure identification consistent with the requirements of its logistics responsibilities.

(b) Because of the item of supply principle, item of supply concepts covering closely related items may exist at different levels of detail and tolerance, according to the number and nature of the characteristics included in the concepts. In this situation the broader item of supply may overlap the narrower item of supply in terms of the range of the pieces or objects covered by each. Each different item of supply, the broader and the narrower, is assigned a separate national stock number (NSN) in the FCS.

(4) Basis for Identification.

(a) The identification and differentiation of an item of supply rests on the characteristics inherent in the concept of the item. The particular characteristics appropriate to a particular concept can be disclosed only by technical research, which therefore serves as the foundation for the process of item identification.

(b) The characteristics of an item of supply are of two basic kinds:

1. Physical characteristics, consisting of everything that enters into the make-up of the item, such as its material content, chemical composition, electrical data, dimensions and the formation or arrangement of its parts, and the principles of operation.

2. Performance characteristics, consisting of the special or peculiar kind of action or service provided by and expected of the item by virtue of its physical characteristics.

**b. Item Identification.** The submitting activity will:

(1) Establish each item of supply with item identification that includes the minimum data required to identify the unique characteristics of the item and differentiates it from any other item.

(2) Use the procedures for item identification found on DLA website.

**c. Item Naming Conventions.** The submitting activity will:

(1) Use a standard item name for the preparation of item identification to:

(a) Provide a consistent comparative structure for item entry control (IEC).

(b) Preclude the addition of duplicate items into the supply system.

(2) Select or develop a single name that provides a common language for materiel management operations.

(3) Use a basic name or a name followed by modifiers for item names necessary to:

(a) Form the basis of the FSC structure for item identification.

(b) Differentiate between other items that have the same basic name.

(4) Delimit the selected basic name where necessary to:

(a) Establish a basic concept of the item of supply to which the item belongs and with which it should be compared.

(b) Distinguish between different items with the same name or between similar items of supply with different names:

(c) Answer the question "What is it?" in the most specific fashion.

(d) Establish a single concept of an item.

(e) Represent the specific name rather than a general name of an item.

(f) Clearly define the distinct functionality expressed by the item name.

(g) Incorporate new, emerging technology in a timely manner.

(5) Select the item name that is most commonly used by government and industry and cross-index the other names to the selected name when two or more names are applicable to an item.

(6) Use the procedures for item name development, usage, and maintenance on the DLA website.

d. FSC. The FCP administrator will:

(1) Design the FSC structure in accordance with the FLIS procedures on the DLA website to:

(a) Permit the classification of all items of supply used by participating activities in the FCP.

(b) Group like items together for management and item identification purposes.

(c) Represent the current universe of commodities known to be in the federal supply system with the flexibility for expansion to accommodate anticipated management needs and technological growth.

(d) Provide uniform management categories throughout the DoD Components and participating agencies.

(2) Establish effective inventory controls to prevent unneeded items from entering into the supply system.

(3) Review FCS data for originated and submitted items and correct invalid and incompatible data including the elimination of duplicate NSNs.

e. NSNs. DLA Logistics Information Services will:

(1) Identify each item of supply by a unique control number or NSN, to differentiate each individual item of supply from all other items of supply.

(2) Assign a distinct NSN to every proposed new item of supply that is not a duplicate of an existing item identification after IEC review.

(3) Assign an existing NSN to a proposed new item of supply only in the event of duplication after an IEC review.

(4) Retain the NSN with the assigned item throughout the life of the item; it cannot be reused or reassigned to another item of supply.

(5) Retain the NSN when the item identification is changed or upgraded due to previously unavailable technical data.

(6) Assign a new NSN if the item identification is combined with or changed to a different item of supply.

(7) Allow the NOCO to establish NSNs in the FLIS database upon providing the FSC, CAGE code, demilitarization code, controlled item inventory code, reference number, and pseudo data elements.

**f. Stock Numbering Criteria.**

(1) For items of supply that are recurrently used, bought, stocked, or distributed, DLA Logistics Information Services will ensure that the NSN assigned is the only one distinct combination of numerals used to identify the same item throughout the federal supply system. In NSN assignment, DLA Logistics Information Services will include:

- (a) Items selected for central management, procurement, and stockage, including both centrally and locally procured items.
- (b) Items stocked in the main or consolidated supply component of a consumer installation to provide supply support for area requisitioners.
- (c) Items for which two or more material demands or requisitions are recorded within a 180-day period, without regard to the participating activity from which the demands were received. The criteria also apply to items procured directly from a commercial source for immediate use.
- (d) Items provided through the Foreign Military Sales (FMS) Program, NATO agreements, and other bilateral government agreements.
- (e) Other items that, at the option of the participating activity, are required to comply with logistics programs where identification by NSN is essential.
- (f) The FLIS item unique identification indicator when required in accordance with DoDI 8320.04.

(2) In NSN assignment, DLA Logistics Information Services will exclude:

- (a) Items procured on a one-time basis for immediate use in research and development, experimentation, construction, installation, and maintenance.
- (b) Items provided by contractors to fulfill service contracts that may provide for overhaul and repair of specified equipment, if such items are consumed in the overhaul cycle and do not enter the logistics system.
- (c) Ships, aircraft, and other major end items for which management and control are exercised through the application of unique identification systems.
- (d) Printed forms, manuals, books, or other printed materials subject to central administrative numbering controls within a bureau, service, or command.
- (e) Items obtained through overseas procurement and intended solely for overseas use.
- (f) Items procured with non-appropriated funds.
- (g) Items manufactured locally for use solely by the manufacturing activity.

(h) Medical items that are:

1. Without an investigational new drug approval or new drug application when such is required and enforced by the Food and Drug Administration.
2. Unique to a single patient or require special fitting, such as orthopedic appliances.
3. Animal blood products, such as sheep cells.

(i) Subsistence items supplied to the commissary resale system.

**3.3. DATA RECORDING AND MAINTENANCE.** The FCP administrator will ensure that data recording and maintenance in the FCS will conform to a fixed set of responsibilities and actions based on IMM responsibilities and relationships in accordance with DoD materiel management guidance in DoDI 4140.01.

**a. Data Recorded and Maintained.** Participating activities will:

- (1) Determine the content of data in accordance with FCP standards.
- (2) Ensure that data conforms to jointly determined standard data format requirements.

**b. Data Input and Output.** DLA Logistics Information Services will:

- (1) Accept data input to and output from the FCS for processing from data submitters.
- (2) Distribute the output to data receivers authorized by joint agreement between the participating activities in the FCP.

**c. IMMs.** Throughout the life cycle of an item of supply, the IMM or the IMM's cataloging agent will:

- (1) Serve as the authorized data submitter to the FCS, unless a separate cataloging support agreement is negotiated by the IMM.
- (2) Establish, record, and maintain management responsibility, as well as current cataloging, supply, and other logistics data in the FCS for those items within the IMM's responsibility.
- (3) Receive and process proposed data revisions from other participating activities using centrally procured items; revise and update the FCS for those items when necessary.
- (4) Delete appropriate item management data and remove user access from the FCS when it is determined by agreements or collaboration efforts that an item within their management responsibility is no longer required by all registered users and all assets were depleted.

- (5) Receive supply support requests for and reactivate assigned NSNs, as needed.
- (6) Develop and maintain catalog management data (CMD) standard data elements and component peculiar data in FCS, and ensure that the IMM CMD record is present in FLIS until all supported participating activities have either withdrawn from the item or the item was logically assigned to another IMM, excluding:
  - (a) Nuclear Ordnance Items. The NOCO is the single submitter for all Department of Energy and Service-designed and controlled nuclear ordnance items, irrespective of FSC. Items under such control will be submitted to the NOCO in accordance with procedures for processing nuclear ordnance cataloging requirements.
  - (b) Cryptomaterial. Items that are unique to cryptologic application and are within the design control of the National Security Agency (NSA), regardless of FSC, will be submitted to NSA for submittal to the FCS.
- (7) Propose FLIS database changes for decentralized (e.g., locally procured) items to the cognizant inventory manager, retail manager, or service item control center activity.
- (8) Review and collaborate on DoD Components' new and proposed revisions for the cataloging tools with other interested DoD Components before submittal to DLA Logistics Information Services.
- (9) Establish controls to prevent security compromise when internal distribution of nuclear ordnance and classified data is required.
- (10) Collaborate with the using participating activities on all new or revised I&S family structures before the entry of the I&S families into FLIS, except those relationships coordinated through the DoD Standardization Program's item reduction study process.

**d. Data Revisions and Updates.** The IMM will revise or update their assigned item data for:

- (1) Centrally Procured Items. The responsible IMM will revise and update the FCS when needed. Participating activities that are recorded users on the item will propose data revisions to the IMM when errors are discovered or data is otherwise not current for items of supply.
- (2) Decentralized (Locally Procured) Items. When procuring items, originating activities will ensure that changes to the FCS are proposed to the responsible IMM, as required.

**e. Logistics Reference Numbers.**

- (1) Submitting activities will configure and format reference numbers to be included in the FCS exactly as provided by the manufacturer or design control activity (DCA), using the technical documentation on DLA website.
- (2) For the assignment of an NSN, the submitting activity will:

- (a) Record the original equipment manufacturer, original component manufacturer, DCA, or the commercial or government entity that holds the design control of the item.
- (b) Record a manufacturer's or DCA's CAGE code and associated logistics reference number for the item of production as a manufacturing source.
- (c) Record a distributor as the design control entity of an item in cases where the distributor owns the design control rights to the item.
- (d) Refer to additional procedures for logistics reference numbers on DLA website.

**f. IEC.** Originating and submitting activities will:

- (1) Apply effective controls for cataloging data to promote the use of standard and preferred items and prevent the entry of duplicate and substandard items of supply into inventory.
- (2) Compare new item candidates with established stock numbered items in FLIS to control items entering the system.
- (3) Conduct provisioning and pre-procurement screening against all known reference numbers associated with an item of supply and data maintained in FLIS before procurement or initiation of item introduction actions, to avoid unnecessary procurements.
- (4) Follow IEC requirements specific to total item record (TIR) processing on DLA website.
- (5) Review all proposed new and existing items when originating or submitting items in the FCS:
  - (a) Isolate and recommend the use of duplicate or replacement items.
  - (b) Promote the use of preferred items.
- (6) Ensure that an accurate identification is established and maintained for each originated and submitted item in the FCS and that all new data entering in the FCS is technically accurate.

**g. Technical Data Requirements.** Participating activities will ensure that technical data supporting supply and logistics life-cycle requirements are available in the FCP to ensure the proper performance of cataloging, item identification, and other logistics data management tasks.

**h. CMD.** The IMM will:

- (1) Develop CMD and registered users will use CMD to maintain their materiel management system.
- (2) Record and store CMD, which consists of standard data elements and component peculiar data, in the FCS.

(3) Develop the standard data elements, and the using participating activity will develop the peculiar data entries.

(4) Maintain the IMM CMD record in FLIS until the applicable participating activities either withdraw interest from the item or it is logically assigned to another IMM.

(5) Maintain CMD using the technical documentation on DLA website.

i. **FCS Change Collaboration.** Participating activities will collaborate if they share an interest in an item when changes are being made or proposed to common interest items using the procedures in this issuance and Volume 8 of DoDM 4140.01. Participating activities will collaborate by using DD Form 1685, "Data Exchange and/or Proposed Revision of Catalog Data," before submittal to DLA Logistics Information Services.

(1) Non-collaboration. Participating activities do not need to collaborate:

(a) When the originating activity is the only recorded user and the FSC is not subject to single submitter procedures.

(b) When the action results from a previously performed formal coordination, including:

1. An item reduction study coordinated in accordance with DoD 4140.26-M.

2. The review of non-stocked items without demands in accordance with the inactive item review procedures in Volume 3 and Volume 9 of DoDM 4140.01.

3. A DLA request for engineering support coordinated in accordance with AR 715-13/DLAR 3200.1/NAVSUPINST 4120.30/AFR 400-40/MCO 4000.18C.

4. Nonconsumable item materiel support request worksheet in accordance with DoD 4120.24-M.

5. DoD family collaboration request in accordance with DLAR 4140.66/AFMCI 20-101/AMC-R 700-30/NAVSUPINST 4410.57/ MCO 4410.24A.

(c) When no change is made in the reference number portion of the cataloging record and the reference number it is identifying.

(d) When an FSC change is proposed that does not result in a change in the primary inventory control activity (PICA) or secondary inventory control activity (SICA).

(e) If the change is initiated to correct an obvious error, e.g., an item identification that does not agree with technical documentation.

(f) When the manufacturer changes part numbering and there is no change made to the item of production.

(g) When the manufacturer is no longer in business or no longer manufactures the item. Reference numbers may be re-coded as a secondary reference without collaboration. However, the last reference number on file may not be changed.

(2) Collaboration. Participating activities will collaborate:

(a) Before revision, transfer, reinstatement, cancellation, or change of data elements on an item for which one or more data collaborator is recorded.

(b) When revision to the characteristics data of an item identification changes the item of supply.

(c) For proposed additions, deletions, or changes to reference numbers related to source controlled items.

(d) For proposed addition or deletion of a reference number that controls the design of an item of production or an item of supply.

(e) For proposed cancellation actions.

(f) For all proposed actions that result in the non-stocking, standardization, consolidation, or termination of the U.S. Navy (USN) Nuclear Reactor Program or USN strategic weapon systems repair parts managed by DLA.

(g) With the participating agencies that share an interest in an item when changes are being made or proposed to common interest items.

(h) Using the procedures in this enclosure and the procedures on DLA website <http://www.dla.mil/HQ/InformationOperations/Offers/Services/TrainingandReference>.

(3) Documentation Requirements for Collaboration.

(a) Submitting activities will retain DD Form 1685 as evidence of collaboration for a minimum of 1 year after approval of the proposal and produce this evidence on a supply support upon request.

(b) Participating activities will forward all supporting technical documentation required to review the proposal when forwarding a proposal for collaboration to the submitting activity.

(4) Non-concurrence in Proposed Actions.

(a) When a participating activity is unable to complete a proposed action, the initiating participating activity will notify all participating activities involved in collaboration of the uncompleted action and provide a brief explanation of the non-concurrence.

(b) When disagreement on a proposal cannot be resolved between the originating activity and non-concurring participating activities, the originating activity may submit for

resolution a copy of the collaboration letter or action, technical justification, and all replies to the Federal Cataloging Committee (FCC) and DLA Logistics Information Services in accordance with the procedures in DoDM 4140.01.

(5) Time Frames.

(a) DLA Logistics Information Services will:

1. Return responses to collaboration proposals to the proposing originating activity within 60 days after initiation and include a statement of concurrence, non-concurrence with justification, or no applicability. If the originating activity does not receive a response within 60 days and receipt of the proposal was confirmed, the originating activity may assume a reply of no applicability.

2. Respond within 120 days after the date of initiation when DLA Logistics Information Services is required to collaborate with NATO.

(b) Participating activities responsible for effecting collaboration will forward collaboration supply support requests to receiving activities within 15 days after receipt from the originating activity.

(c) The originating activity will forward the cataloging transaction request to FLIS within 20 days of receipt of concurrence by all interested participating activities.

**3.4. DATA DISSEMINATION.** DLA Logistics Information Services will make FCS data and publications available to the public in accordance with Section 552 of Title 5, United States Code. DLA Logistics Information Services will not make FCS data available to the public when it contains:

- a. Business sensitive data, that could reasonably be considered as being competitively harmful if released to a third party.
- b. Technical data, commercial software, or computer software documentation for which the government does not have a license enabling disclosure to third parties.
- c. Official use only information where it would not be in the best interest of the government.
- d. Classified information.

**3.5. DTRA DATA DISSEMINATION TO DLA.**

a. DTRA will provide DLA Logistics Information Services with the following unclassified cataloging data elements twice monthly:

- (1) FSC.
- (2) NIIN.

(3) Controlled item inventory code.

(4) Demilitarization code.

(5) Unit price.

(6) Quantity unit pack.

(7) Unit of issue.

b. DLA Logistics Information Services will provide this data to the Defense Standards System.

### **3.6. CATALOGING TOOLS AND PUBLICATIONS.**

a. DLA Logistics Information Services will:

(1) Develop, compile, and publish FCS tools to develop FCP item identification data and publications to satisfy the needs of all users of the cataloging, supply support, and other logistics data contained in the FCS.

(2) Ensure adherence to requirements to publish separate cataloging tools and publications in the interest of national security.

(3) Maintain and distribute FCS tools and publications via the most current technological media that satisfies the needs of its customers.

b. Participating activities may issue publications to support their basic missions in accordance with guidance published by DLA Logistics Information Services.

c. The NOCO will develop and maintain all cataloging tools and publications that are applicable solely to items designed specifically for use in the nuclear ordnance field.

d. Participating activities will coordinate their effort to develop new and revised cataloging tools and publications with all interested participating activities before submitting proposals to DLA.

### **3.7. QUALITY ASSURANCE AND QUALITY CONTROL.**

a. **Quality Control.** The FCP administrator will ensure that all materiel, supplies, services, and data obtained for and used by the FCP will:

(1) Conform to FCP guidance, FCS and FLIS requirements, and procedures in this issuance.

(2) Provide practical and enforceable requirements.

(3) Promote FCP, FCS, and FLIS user satisfaction and mission effectiveness.

b. **Quality Assurance.** The FCP administrator will:

(1) Maintain a quality assurance program and procedures as integral parts of the FCS, including data preparation, entry and retention in the database, and distribution and retention of data from that database.

(2) Verify the accuracy of the data through various quality assurance techniques.

(3) Provide quality assurance feedback on the program to the DoD Components.

### 3.8. INTERNATIONAL CATALOGING PROCEDURES.

a. The United States maintains the NATO Supply Classification System, including right of decision on matters pertaining to it, pursuant to NATO STANAG 3150.

(1) If U.S. participating activities propose revisions to the classification structure, DLA Logistics Information Services will forward these revisions to NATO member nations for review, providing 45 days for individual NATO countries to respond. On completion of coordination, DLA Logistics Information Services will:

(a) Approve the revision, specifying the implementation dates if coordination is completed or a majority of concurrences are received.

(b) Consider and incorporate, if acceptable, modifications to proposed revisions, as submitted by the NATO countries.

(c) Resolve any conflicts of opinion if the NATO countries submit a majority of non-concurrences or major proposals for modifications to the revision.

(2) DLA Logistics Information Services will decide on revisions that a NATO member nation (other than the United States) proposes after the 45-day allotted time for NATO's concurrence actions. DLA Logistics Information Services will forward notice of the final disposition of all proposed revisions to the classification system to all NATO countries, stating, as appropriate, the reasons for non-acceptance of comments.

(3) The NATO member nation that originally proposed the revisions to the classification structure will forward proposed revisions to all signatories of NATO STANAG 3150. Other signatories will forward concurrence or comments to the originating country and to the United States within 45 days. DLA Logistics Information Services will forward notification of approval to all signatories. The United States and all NATO member nations will implement approved revisions on the effective date (ED), which is specified in the notification of approval.

b. To coordinate NATO changes to the FCS, the FCP administrator will follow:

(1) NATO STANAG 3150, which provides a uniform system of supply classification for use by the NATO armed forces, adopting the U.S. FSC as the NATO Supply Classification for use by signatory countries' armed forces assigned to NATO.

(2) NATO STANAG 3151, which provides a uniform system of item identification for use by the NATO armed forces, adopting the U.S. federal system of item identification as a basis for the NATO item identification system for use within the signatory countries' armed forces assigned to NATO.

(3) NATO STANAG 4199, which defines a uniform system to establish and exchange selected management data elements between NATO countries.

(4) NATO STANAG 4177, which defines the procedures for a uniform system of data acquisition for use by the armed forces of NATO countries and by NATO agencies in codification. It includes a sample contract clause that may be added to defense contracts to require the contractor to provide technical data for cataloging purposes.

(5) NATO STANAG 4438, which defines a uniform system for the dissemination of data associated with NATO stock numbers for use by the armed forces of NATO countries. It includes restrictions that specify what data may be disseminated to non-NATO countries.

c. The United States provides a standard form of agreement to the NATO nations and agencies and to other nations for federal catalog data and cataloging services on a reimbursable basis through FMS cases.

(1) Foreign participating activities will submit a request for preparation and issuance of an FMS agreement in accordance with Defense Security Cooperation Agency Manual 5105.38-M.

(2) In accordance with conditions outlined in the FMS agreement and on receipt of a request, the procuring or provisioning participating activity will perform all necessary functions associated with materiel management. DLA Logistics Information Services will provide regular NSN file update notifications in a media suitable to each participating country.

(3) DLA Logistics Information Services will only provide these services and data to foreign participating activities that have concluded agreements with the United States for these services and data. The United States and other NATO member nations will provide some cataloging products and services, such as item identification, to each other free of charge under reciprocal agreements.

(a) The FMS agreement will specify the prices based on the latest cost figures available. The prices will be revised periodically to accommodate changing conditions.

(b) DLA Logistics Information Services will submit requests for reimbursement of services and data in accordance with instructions established in the FMS agreement.

(c) NATO and other member nations will reimburse the U.S. participating activity in U.S. currency for services and data provided, as specified in the FMS agreement.

d. Each participating country will:

(1) Maintain its own internal national catalog files, including files of approved catalog data where another country is registered as a user of the items.

(2) Exchange data with another participating country in accordance with Allied Codification Publication Number 1.

(3) Accept the item-of-supply concept, in the case when a member of the North Atlantic Treaty Organization Codification System (NCS) adopts the NATO stock number of another NATO nation or causes a new NSN to be established on its behalf. The assigning nation will have configuration control responsibility and full catalog maintenance authority for that item, subject to the exceptions on DLA website

<http://www.dla.mil/HQ/InformationOperations/Offers/Services/TrainingandReference>.

e. For support of procurements by NATO and other participating countries:

(1) DoD Components will apply the same contract clauses and contract administration, when procuring for a participating country as it would use in procuring for itself, except where deviations are authorized in the Defense Federal Acquisition Regulation Supplement.

(2) The participating country with design control authority will provide item identification data and stock numbers to a procuring NATO member nation or agency when provisions of the contract identify the requirement.

(a) When the United States is the country with design control authority of items procured by another NATO member nation, the U.S. submitting activity will codify them.

(b) When a NATO member nation other than the United States produces an item and has design control authority, that country will codify the item. U.S. submitting activities will submit requests for foreign item identification data to the U.S. NCB.

(3) For a list of all the document identifier code (DICs) transaction formats used in FLIS, refer to DLA website

<http://www.dla.mil/HQ/InformationOperations/Offers/Services/TrainingandReference>.

### **3.9. OUTPUT DISTRIBUTION.** DLA Logistics Information Services will distribute output data catalogs to data receivers authorized by the participating activities.

a. The participating activity point of contact (POC) will forward requests for original or revised distribution requirements to DLA Customer Interaction Center via telephone: 877-352-2255, fax: 269-961-7791, or e-mail: [dlacontactcenter@dla.mil](mailto:dlacontactcenter@dla.mil).

b. The participating activity will specify:

(1) Distribution to be made to the participating activity's central points or other individual participating activities.

- (2) Media, including compact disc, digital video disc, or electronic data transmission.
  - (3) Format, including either fixed length or jointly determined standardized data exchange TIR output.
  - (4) The routing identifier code when electronic facilities are not available or an output transmission is restricted from electronic transmissions. Select electronic data transmission and use alternate output media, such as compact disc, digital video disc, or listings.
- c. DLA Logistics Information Services will:
- (1) Establish controls to ensure that a specific activity does not receive the same output more than once.
  - (2) Sequence transactions for the FLIS file maintenance output and include:
    - (a) NIIN as the primary index.
    - (b) File maintenance sequence number as the secondary index using the technical documentation on DLA website.
    - (c) Outputs issued in document control serial number sequence.
    - (d) FLIS notification in document control serial number sequence.
    - (e) Provisioning screening results in submitter control number sequence.
    - (f) Simplified file maintenance in NSN or NIIN sequence.
- d. For the storage of information concerning participating activity distribution decisions:
- (1) DLA Logistics Information Services will:
    - (a) Use a drop table solely in the output process.
    - (b) Use a drop table to eliminate distribution of file maintenance and notification data to a participating activity that does not want to receive data.
    - (c) Select data to drop by DIC, segment code, or both.
      - 1. When only the DIC is identified to be dropped, drop all segments within that DIC.
      - 2. When only the segment code is identified to be dropped, drop that segment regardless of maintenance DIC.
      - 3. When the DIC and segment code are both identified, only drop that combination.

(d) Register the data to be dropped, as predetermined by the participating activity in the drop table.

(2) Participating activities may make inquiries regarding current activity drop status by contacting the DLA Customer Interaction Center; telephone 877-352-2255, FAX 269-961-7791, or email address [dlacontactcenter@dla.mil](mailto:dlacontactcenter@dla.mil).

(3) The PSMAT determines provisioning screening output. FLIS maintains PSMAT documentation. A participating activity may obtain the PSMAT by contacting the DLA Customer Interaction Center: telephone 877-352-2255, FAX 269-961-7791, or email address [dlacontactcenter@dla.mil](mailto:dlacontactcenter@dla.mil).

e. Participating activities will select data recipients, which are maintained in five categories in FLIS:

(1) Item identification data receivers, as specified in the major organizational entity (MOE) Rule Table, the Standard FSC Table, and supplementary participating activities in segment B on an item-by-item basis.

(2) Central control points specified as needed instead of item identification data receivers or in addition to item identification data receivers.

(3) CMD recipients.

(4) Freight data recipients, for confirmed and unconfirmed data.

(5) TIR data recipients.

f. The participating activity will select notification data recipients, which are maintained in four categories in FLIS:

(1) The originating activity of the input transaction.

(2) The submitting activity of the input transaction.

(3) The destination activity specified in the PSMAT for the screening destination activity code on DLA website.

(4) CMD activities designated by each participating activity using the technical documentation found on DLA website.

g. FSC distribution will rely on the recorded FSC managers in the Standard FSC Table. The participating activities will forward file maintenance, excluding data suppressed by drop tables, and advance informative notifications to FSC managers in technical documentation on DLA website. If the FSC manager is recorded on the item, they will receive the output as a result of this item recordation and not FSC distribution. FSC will distribute advance informative notification only as a result of FSC changes.

h. DLA Logistics Information Services provides FLIS output that can be requested for distribution.

(1) The submitting activity will submit item identification data to DLA Logistics Information Services for processing. DLA Logistics Information Services will generate output for use by the participating activity:

(a) File maintenance update actions include:

1. Actions requesting stock number assignment or reinstatement are approved and result in records being established in the master file.

2. Maintenance actions that add, change, or delete established data. Maintenance actions may be previously output as advance notifications in the case of actions with an ED.

3. Actions that cancel existing records.

4. Distribution of item identification file maintenance update output to item identification data receivers.

(b) The four types of notifications for item identification that are provided as output include:

1. Notification to the originating or submitting activity that the input transaction was approved.

2. Notification to the originating or submitting activity that the input transaction did not pass specific edit and validation criteria. This can be either a reject or a notification of suspense.

3. Advance notification to the data receiver of a future action with an ED.

4. Notification to the originating or submitting activity that an input transaction has resulted in a match condition in FLIS. For further technical information, participating activities will refer to DLA website.

(2) Transactions with item management coding (IMC) data for NIINs in FSC classes are subject to IMC. The IMM will only submit IMC data if the item is coded for integrated materiel management.

(a) DoD or federal functional managers will verify IMC and logistics reassessments for their assigned areas.

(b) DLA Logistics Information Services will:

1. Notify the submitting activity that the transaction was approved or rejected.

2. Notify the Item Management Classification Agency to provide interrogation results. This consists of segments A, B (all except NATO), E, H, 9, applicable futures file data,

and, if the input card identification code is D, output data request code (ODRC) 0274 data source of supply (SoS).

3. Provide all notification as output at the time the input transaction is processed.

(3) DLA Logistics Information Services will provide output from transactions to add or delete standardization relationships and change standardization decision data in order to:

(a) Provide updated file data for file maintenance to item identification data receivers.

(b) Notify the originating or submitting activity of approvals or rejections.

(4) DLA Logistics Information Services will provide the output as file maintenance updates and notifications for transactions to add, change, or delete MOE rule records with related data elements for individual NIINs.

(a) DLA Logistics Information Services will provide updated file data to item identification data receivers for file maintenance.

(b) The types of notifications provided as output notifications include:

1. Notify the originating or submitting activity that the transaction was approved or rejected.

2. Notify the responsible participating activities that a transaction was approved but caused a conflict condition.

3. Notify the item identification data receivers in advance that a future action with an ED was approved.

4. Notify the responsible participating activity that FLIS did not receive the response to a notification of conflict or a notification of future actions with an ED.

5. Notify all authorized item identification data receivers that FLIS deleted a logistics transfer from the futures file, as authorized by the DLA Logistics Reassignment Monitor.

(c) DLA Logistics Information Services will provide the output the file maintenance update for:

1. Actions with an ED on the ED.

2. Actions without an ED and all notifications at the time the input transaction is processed.

(5) DLA Logistics Information Services will:

(a) Provide the outputs as file maintenance updates and notifications from transactions to add, change, or delete a complete segment H or specific CMD data element for an assigned NSN in accordance with technical documentation on DLA website.

(b) Complete file maintenance updates.

1. Send file updates to Enterprise Business System (EBS) on the processing date for CMD actions initiated by EBS. EBS will not receive maintenance updates when initiated by a retail SICA.

2. Send the USN CMD updates from USN zero CMDs with an ED in accordance with technical documentation on DLA website.

3. Send file updates as a result of zero for CMDs with an ED to the NSA and the Federal Aviation Administration, when functioning as either the wholesale PICA or the retail SICA.

4. Send file updates to the U.S. Marine Corps (USMC) only for those actions submitted by the USMC with a zero date. USMC submitting activity may function as either a PICA or SICA.

5. Send CMD file updates to the U.S. Army in accordance with a data distribution look-up table in technical documentation on DLA website. Identify those U.S. Army activities that will receive or maintain CMD without regard to PICA or SICA level of responsibility in the table.

6. Send CMD file updates for the U.S. Air Force (USAF) to activity code SA in response to USAF zero for CMD submittals with an ED.

7. Send file maintenance updates to NATO on the ED of CMD input for NSNs on which NATO is recorded.

8. Send CMD file updates to the United States Coast Guard based on technical documentation on DLA website.

(c) Provide notifications as output for CMD maintenance actions.

1. Notify the submitting activity that the transaction was approved or rejected.

2. Notify the designated participating activity that a future CMD update action with an ED was approved.

3. Notify recorded SICAs that the lead service IMM updated its segment H record. USAF and USMC recipients of this notification are not required to update their CMD records if the record was updated automatically. USN recipients of this integrated materiel management notification are not required to respond with input, since their Service CMD record is updated automatically by the IMM's input. FLIS does not update USN SICA segment H from lead Service submittals.

4. Notify the USN central cataloging activity, activity code GM, that a non-USN lead Service IMM update was processed by FLIS.

(d) Provide output monthly to the pertinent participating activity, except for zero input with an ED, which will be provided immediately. The ED for approved CMD update actions governs when the file maintenance data will be distributed.

(e) Forward notification of approval or rejection of input transactions and notifications from input of approved future transactions with an ED on the processing date.

(f) Provide output notification to the retail services that the wholesale manager updates were processed 45 days before the ED for input with an ED or on the processing date of zero input with an ED.

(6) For DLA Transaction Services SoS update data:

(a) DLA Transaction Services will be the only recipient of tailored SoS updates for file maintenance update. Other CMD recipients, including the submitting activity, will receive normal file update packages through CMD processing.

(b) DLA Logistics Information Services will not provide notifications resulting from normal CMD update DLA Transaction Services.

(c) DLA Logistics Information Services will provide normal SoS file updates based on EDs to the DLA Transaction Services and will provide critical SoS file updates immediately.

(7) For freight classification data, DLA Logistics Information Services will:

(a) Provide outputs from transactions to add, change, or delete freight classification data by the item managers.

(b) Provide updated file data and notification of file maintenance update to freight receivers identified in technical documentation found on DLA website.

(c) Provide notification to the originating or submitting activity that the transaction was approved or rejected.

(8) For DoD I&S family data, DLA Logistics Information Services will:

(a) Provide updated file data to I&S receivers.

(b) Provide notifications to:

1. The originating or submitting activity that the transaction was approved or rejected.

2. I&S receivers in advance that a future action with an ED was approved.

(9) For search by reference number, DLA Logistics Information Services will:

- (a) Provide notification for output from searches made by NSN.
  - (b) Provide reject notification as output to the participating activity identified by the screening activity code, except for provisioning screening.
  - (c) Use the PSMAT to determine which participating activities receive search results, the media for distribution, and the data format.
  - (d) Base notifications and results on the submitting activity code in response to search by reference number transactions using the document control number (DCN) instead of the submitter control number.
- (10) Participating agencies will use tailored interrogations to extract data based on the submitted NIIN.
- (a) The submitting activity will designate through the ODRC content that may be an individual data element, groups of data elements from a segment, a complete segment of data elements, or a combination of various segments.
  - (b) DLA Logistics Information Services will only distribute notifications, either rejections or interrogation results, to the submitting activity.
- (11) Mass data retrieval involves a mass extraction of multiple items based on the submitted key data element, such as the item name, item name code (INC), FSC, Federal Supply Group code, CAGE code, NATO commercial and government entity code (NCAGE), or MOE code.
- (a) The submitting activity will:
    1. Send input through the DLA Logistics Information Services Program Manager, who will control scheduling.
    2. Use the ODRC to designate the content of the output data for each individual item extracted.
  - (b) DLA Logistics Information Services will:
    1. Communicate with the submitting activity to clarify information as needed.
    2. Provide all outputs in the form of notifications to the submitting activity.
    3. Ensure that the sequence of output will be by DCN for the overall package and by NSN within the package.
    4. Forward interrogation results to the submitting activity.
    5. Forward the output by mail in accordance with the Output Control Participating Activity Code Table in FLIS.

6. Designate the output by the alternate output media code when the originating activity is an electronic data recipient.

(12) For a TIR tailored interrogation that extracts TIR data based on the submitted key data element, such as CAGE code, NCAGE, cataloging activity code, item name, INC, FSC, or item identification guide (IIG):

(a) The submitting activity will designate through the ODRC the content of the output.

(b) DLA Logistics Information System will:

1. Provide all output in the form of a notification to the submitting activity.

2. Communicate with the submitter to clarify information as needed.

3. Ensure that the sequence of the output will be by DCN for the overall package, if designated in the ODRC.

4. Ensure that the sequence of the output will be designated by the sequence of the input key data elements, if not designated in the ODRC.

5. Forward the interrogation results to the submitting activity.

6. Specify the media as magnetic tape or electronic data transmission.

(13) Participating agencies will use mass data retrieval in FLIS to complete a mass extraction of data for multiple records, such as all approved item names, colloquial names, basic names, or index entry codes from the item name, FSC sector or related item name data applicable to an IIG. The key data element on input is the type of item name or the IIG number, respectively.

(a) The submitting activity will:

1. Send input through the DLA Logistics Information Services Program Manager, who will control scheduling.

2. Designate the content of the output data through the ODRC.

(b) DLA Logistics Information Services will:

1. Provide all output in the form of notification to the submitting activity.

2. Communicate with the submitting activity to clarify information as needed.

3. Ensure the sequence of the output will be by DCN for the overall package if designated in the ODRC.

4. Ensure that the sequence of the output will be designated by the sequence of the input key data elements if not designated in the ODRC.

5. Forward interrogation results to the submitting activity.

6. Specify the media as magnetic tape, electronic data transmission, or machine listing.

(14) For TIR, participating activities will receive automated file maintenance of three files from FLIS: CAGE (organizational entity (OE) master file), MOE Rule Table, and Standard FSC Table. When there are additions, deletions, or changes to these files within FLIS, DLA Logistics Information Services will:

(a) Distribute external output to the participating activities.

(b) Provide TIR file maintenance to the participating activities recorded as file maintenance recipients.

(c) Distribute FLIS database file maintenance updates that occur as a result of changes to the TIR to the participating activities in accordance with the rules in FLIS for item identification file maintenance.

(d) Forward notifications of rejections or approvals to the participating activities.

### **3.10. FIXED LENGTH RECORD FORMATS**

a. DLA Logistics Information Services will conform to jointly determined standard data format requirements.

b. Submitting activities will:

(1) Comply with formatting procedures approved by DLA Logistics Information Services for use in the exchange of data.

(2) Refer to technical documentation for the standard data formats for each of the headers and segments established for FLIS data exchange on DLA website.

**3.11. SEQUENCE PROCESSING.** The FCP administrator will queue input transactions after processing through input control in logical processing groups so that an operation or string of operations may be initiated to process the data contained in a queue.

a. **Dynamic Scheduling.** The FCP administrator will maintain a file that will reflect the contents of the queues and their related response requirements priority, e.g., emergency NSN requests, interrogations, search, and provisioning screening. Based on this queue status information and various processing optimization factors, the system controller will determine what application is to be initiated and what priority it is to receive in relation to the applications currently in operation.

**b. Fixed Interval Scheduling.**

(1) FCP administrator will:

(a) Assign all transactions through input control a processing control number, which will include the Julian date that the control number is assigned.

(b) Queue transactions for processing by control number.

(c) Sort queues containing FLIS update transactions before processing to achieve the necessary sequence.

(2) The system controller will:

(a) Recognize the need for the scheduling of operations, as required, and determine if a specified condition was reached.

(b) Process FLIS update transactions, including:

1. NIIN assignment, as soon as conveniently possible..

2. Item status transactions with deletions first, then changes and additions.

3. Other FLIS database update transactions deletions first, followed by additions, and last by changes.

(c) Process electronic data transmissions through input control number in the order in which they are received.

(d) Process mail transactions as required by operational considerations.

**3.12. SUSPENSE FILE.**

a. The suspense files maintain a temporary record of all FLIS "L" and "K" transactions for 60 days after processing completion. The participating activity will send follow-up inquiries concerning the status of a submitted transaction to FLIS using DIC "LFU" when final disposition was not received. FLIS provides information on output DIC "KFU," which allows the request or to determine what subsequent action must be initiated to implement the intent of the original transaction.

b. The suspense files maintain a temporary record of conflict conditions for selected data pertaining to approved transactions. Periodically, these records in FLIS generate follow-up notifications to the responsible participating activities. The DIC "KFP" transactions will reflect the need to correct the file inconsistencies. The participating activity will send corrective data to FLIS on transactions to add, change, or delete the applicable data causing the conflict condition.

**3.13. UNPROCESSABLE TRANSACTIONS.**

a. DLA Logistics Information Services will:

- (1) Retain transactions that are not queued for processing in the FLIS transaction history file for processing.
- (2) Return transactions that cannot be processed though FLIS with DIC "KRU" to the submitting activity if it is automatically identifiable.
- (3) Manually review the transaction for further resolution before returning to the submitting activity when it is not automatically identifiable.
- (4) Provide DIC KRU to give quick visibility to the submitting activity that the transaction was terminated without being subjected to all system edits, screens, and other processes, as the system cannot determine which decisions the transaction should be subjected to or processed against.

b. The submitting activity will:

- (1) Correct the original transaction and resubmit it to DLA Logistics Information Services in its entirety when errors occur.
- (2) Include the minimum essential control elements for all transactions, or else the transaction will not be processed or queued for processing.
- (3) Refer to the common types of errors that cause transactions that cannot be processed, which are listed in Table 1.

**Table 1. Common Causes of Unprocessable Transactions**

#	Common Cause of Unprocessable Transaction
1.	The submitter and the routing identifier codes conflict.
2.	The originator or submitters are invalid or blank.
3.	The controlling document number contains errors or blanks.
4.	Invalid DICs.
5.	Conflicts between DICs in a DIC "LMD" transaction.
6.	Conflicts between DIC and mandatory or allowable segments; invalid segment codes.
7.	Invalid package sequence numbers.
8.	Segment counters do not agree with data submitted.
9.	Established lengths or occurrences exceed allowable limitations.

### **3.14. ERROR PROCESSING.**

a. FLIS responds to certain conditions during error processing, including:

- (1) Use of a segment Q if the returning conditions fail to pass the established edit and validation criteria and the value of the data elements is to be included with the return code.
  - (2) Use of a segment P if the returning conditions fail to pass established edit and validation criteria and the data elements are not to be included with the return code.
  - (3) Termination of any further processing of the input and suppress output notification to data receivers of the specific transaction if system error is encountered.
  - (4) Production of a system error if the conditions include FLIS imbalances, requirement voids, and computer operation errors.
    - (a) When a system error is encountered during processing, FLIS outputs notification with DIC "KRE," segment P, return code TP, and any other errors that occur up to the point of system error.
    - (b) Normally, when return code TP is received, a participating activity should not generate DIC "LFU;" however, if DIC "LFU" is generated to FLIS, FLIS outputs notification with DIC "KFU," follow-up status code BX, segment P, return code TP.
- b. Participating activities refer to technical documentation for defining return codes found on DLA website.

### **3.15. FLIS PROCESSING MALFUNCTION.**

- a. DLA Logistics Information Services will:
  - (1) Isolate the problem area and determine when the FLIS malfunction began and how far back in time the input image file must be searched to reestablish appropriate input transactions.
  - (2) Complete the recovery of FLIS transaction volumes from a processing malfunction using the DIC "KPM" process within 8 days, a method within FLIS that notifies participating activities that a malfunction was discovered and reprocessing has occurred after corrective action was taken. KPM processing is limited to a maximum of 8 days.
  - (3) Reprocess the file maintenance actions to restore the item to its correct state.
  - (4) Provide the resulting output of a DIC "KPM" with a total file generated on a transaction-by-transaction basis.
  - (5) Forward file data to all normal data recipients after reprocessing has occurred.
- b. When recorded as data recipients, participating activities will:
  - (1) Continue receiving file maintenance data on an item when the participating activities receive file data on the item during the malfunction, but are not recorded as recipients after reprocessing.

(2) Review the DIC “KPM” transaction, take action to add their activity as a user, and then resubmit supply management data if an interest in the item exists.

(3) Take action based on the DIC “KPM” transaction if the item is recorded in the recipient’s files for which an interest does not exist and the participating activity wishes to remove the item from its files.

### **3.16. CATALOG TOOLS PROCESS.**

#### **a. MOE Rule File Maintenance.**

(1) Participating and submitting activities will follow procedures for requesting update actions through DLA Logistics Information Services outlined in technical documentation found on DLA website.

(2) DLA Logistics Information Services will:

(a) Subject all proposed file maintenance actions to machine edit and validation procedures to ensure completeness and accuracy.

(b) Use an automated data distribution system to provide updates to the participating activity systems.

(c) Include with current data receivers for catalog tools MOE rule output activity codes “AJ,” “AN,” “AZ,” “CL,” “CT,” “HD,” “KE,” “PA,” “SA,” “TR,” and “XF” as listed in the technical documentation found on DLA website.

(d) Provide the MOE rule output DICs from Table 2 and related data to the participating activity systems.

**Table 2. MOE Rule Output DICs**

DIC	Title
KUA	Add total catalog tools MOE rule record. Applies to both new and reinstated MOE rules.
KUB	Cancel catalog tools MOE rule with replacement. This represents a MOE rule status code update with a replacement MOE rule(s) in the 803 segment.
KUC	Change catalog tools MOE rule record. The entire MOE rule record will be replaced.
KUD	Cancel without replacement or delete catalog tools MOE rule record. This action updates the MOE rule status code or deletes the MOE rule record completely.

**b. FSC Table.** DLA Logistics Information Services will use the Standard FSC Table, which contains the FSC groups and classes listed in DLA's Cataloging Handbook H2, to validate functional assignments and codes by FSC, and determine which participating activities will receive output distribution on an FSC basis.

**c. FSC Management Data Maintenance.**

(1) To add information to the FLIS for a new FSC, the participating activity completes and forwards the request to DLA Logistics Information Services using the technical documentation on DLA website.

(2) DLA Logistics Information Services will:

(a) Subject all proposed file maintenance actions to automated validation procedures to ensure completeness and accuracy.

(b) Use an automated data distribution system to provide updates to the participating activity systems.

(c) Include in current data receivers for catalog tools FSC management output activity codes "AJ," "AN," "AZ," "BD," "BF," "CL," "CT," "KE," "PA," "SA," "TR," and "XG" as listed in technical documentation found on DLA website.

(d) Provide the FSC management output DICs from Table 3 and related data to the participating activity systems.

**Table 3. FSC Management Output DICs**

DIC	Title
KUE	New Catalog Tools Standard FSC Management Record. (Applies to new, reinstated, and revised FSC management records.)
KUF	Delete Total Catalog Tools Standard FSC Management Record. (Deletes the complete record and all attribute management data from the files.)

**d. TIR OE Master File.**

(1) Any U.S. or foreign participating activity may request new CAGE and NCAGE code assignments or updates to existing CAGE and NCAGE codes.

(2) The participating activity will submit requests for new CAGE and NCAGE or updates to existing CAGE and NCAGE data.

(3) DLA Logistics Information Services will:

- (a) Subject all input transactions to automated validation processing and then suspend the input transactions for DLA Logistics Information Services process owner review and approval or rejection.
- (b) Provide the receivers appropriate file maintenance data for their NIIN records if the processed transaction involves a CAGE code or an NCAGE code with one or more reference numbers.
- (c) Use automated DIC KDR and KAR transactions to update actions to delete cancelled OE codes and add replacement OE codes.
- (d) Forward data to the specific data receivers with DIC "KHN" for OE file maintenance data and DIC "KDR" when the NIIN file maintenance data is determined.
- (e) Use the output DICs from Table 4 to forward output data to other participating activities.
- (f) Refer to the procedures governing OE outputs contained in technical documentation found on DLA website.

**Table 4. FLIS Output DICs**

DIC	Title
KHN	TIR OE File Maintenance Data
KDR	NIIN File Maintenance Update
KAR	Reference Number OE Transfer (Forwarded to applicable receiving activities as a result of FLIS processing an approved input transaction in which one or more reference numbers were transferred from a cancelled OE code to a replacement OE code.)

**e. Catalog Tools Master Freight Table Maintenance.** DLA Logistics Information Services will:

- (1) Complete all updates to the Master Freight Table using the FLIS Online Master Freight System.
- (2) Provide new additions, reinstatements, changes to the class rating and freight descriptions, cancellations, and cancel with replacement actions using the FLIS Online Master Freight System.

**3.17. FLIS MASS CHANGE PROCESS.** The participating activity will submit each FLIS mass change request (CR) through DLA Logistics Information Services process owner or the process owner will initiate the request. DLA Logistics Information Services will:

- a. Use preprogrammed FLIS mass change with their established programs and when no additional programming is required.
  - (1) A transaction that executes mass change will cause:
    - (a) Identification of the affected file items in FLIS.
    - (b) Completion of the maintenance actions required on the items.
    - (c) Generation of the appropriate output.
  - (2) The participating activity or DLA Logistics Information Services process owner will:
    - (a) Provide the change criteria that require the mass change.
    - (b) Trigger preprogrammed mass changes by transactions input or requests to update or revise a TIR.
  - (3) An example of a special project mass change is the item management change from one IMM to another IMM for all the items within a specific FSC. The losing IMM is obligated to coordinate the management change with the gaining IMM. DLA Logistics Information Services will require the gaining IMM to provide the criteria necessary to generate DIC "LCU" transactions to change all the affected MOE rules on those items for which the losing IMM is recorded as manager. In normal operating conditions, DLA Logistics Information Services will require 90 days to program this example.
    - (a) DLA Logistics Information Services will require certain criteria to initiate special project mass change, including:
      1. The identity or identifying characteristics of the items to be changed, e.g., all items within a specific FSC.
      2. The superseding MOE rule.
      3. The action required on the supplemental collaborators and receivers.
    - (b) DLA Logistics Information Services will not change the item status codes and CMD recorded against affected items. The responsible participating activity will input the required maintenance on a by item basis.
- b. Functional areas or data elements for mass changes are listed in Table 5 and Table 6.

**Table 5. Data Elements for Mass Changes in FLIS**

<b>Freight Data Elements:</b>
Class Rating
Freight Description
Assigned FSC
<b>IIG Data Elements:</b>
Characteristics Data Group
Master Requirement Code
Coded Reply
Clear Text Characteristic Reply
Mode Code, Permissible
And Symbol
Or Symbol
Secondary Address Code
Guide Number, IIG
Item Name Code

**Table 6. Functional Areas for Mass Changes in FLIS**

<b>Functional Areas</b>
CAGE Code
NCAGE Code
National Motor Freight Classification (NMFC) Code
NMFC Sub-Item Number
Uniform Freight Classification Code (UFC)

c. The following procedures and formats are used for mass changes.

(1) CAGE or NCAGE Mass Change Processing. Participating activities will refer to technical documentation for CAGE or NCAGE mass change processing found on DLA website.

(2) Freight Mass Change Processing. DLA Logistics Information Services freight process owners will:

(a) Execute freight mass change processing as a result of changes to the NMFC code, NMFC sub-item number, or UFC code using the technical documentation on DLA website.

(b) Show changes to any of the data elements on the NIIN and forward those changes to all authorized freight receivers as DIC "KCF" output.

(3) Freight Data Element Mass Change Processing. Participating activities will:

(a) Refer to technical documentation for the mass change processing of the freight data elements on DLA website. Freight data element mass change processing updates freight classification records previously established in the master freight file.

(b) Follow the guidelines for input formats contained in technical documentation on DLA website.

(4) FSC Mass Change Processing

(a) On a special project basis or input by the affected departments or agencies on an item-per-item basis, DLA Logistics Information Services will execute the change of MOE rules and related data elements that are necessary because of a FSC mass change.

(b) Participating activities will refer to technical documentation for information relative to FSC and MOE rule processing on DLA website.

(5) Characteristic Mass Change Processing. Characteristic mass change may occur as a function of the development of a new IIG document or as part of a change to an existing IIG.

(a) DLA Logistics Information Services will:

1. Initiate the characteristic mass change process using internal transactions.
2. Use the mass change process will update IIG, INC, item identification type, and characteristic data using DICs "LGG," "LGO," and "LGT."
3. Send updated NSNs to authorized receivers when technical changes result in updating FLIS data.
4. Ensure that the mass change process will run after the ED of an IIG action.

(b) Participating activities will refer to technical documentation on DLA website for:

1. The requirements in item name submittals.
2. IIG page changes for IIG characteristic mass change.

d. The participating activity or DLA Logistics Information Services process owner will:

(1) Send all requests for special project mass change processing of data elements to DLA Logistics Information Services.

(2) Prepare the requests in a letter citing all criteria necessary to create the mass change.

**3.18. FLIS MASS DATA RETRIEVAL.** Mass data retrieval is designed to extract segment data from FLIS or partial or complete files from the TIR based on the input of key data elements.

a. Participating activities will:

(1) Submit all requests for mass retrieval of FLIS data to the DLA Logistics Information Services.

(2) Include in the request the key data elements and values to be interrogated and an ODRC to designate the FLIS database segments required.

(3) Use the procedures for selecting the appropriate ODRC data record number (DRN) and key data elements found on DLA website.

b. The DLA Logistics Information Services will:

(1) Input the FLIS mass data retrieval transaction through the use of internal DIC "LTM."

(2) Construct the DCN with the activity code of the requester as the originating activity code; the DLA Logistics Information Services code as the submitting activity code; the induction date as the transaction date; the requester's three-position project number; and a sequentially assigned four-position number.

(3) Sequentially assign the last seven digits for each different mass data retrieval input transaction, if the requester did not provide a project number.

(4) Output the mass data retrieval results through DIC "KTA," which will include a header for each NIIN and the requested segments applicable to each item. All headers applicable to a specific mass data retrieval transaction will include the same DCN. The package sequence number will be applied to the records for each NIIN as a separate package.

(5) Sequence the output data by NIIN within the DCN package.

(6) Output segment K for cancelled items on mass data retrieval by Federal Supply Group and FSC only at the request of the submitting activity. All other mass data retrievals will not include cancelled items.

c. Forward all mass data retrieval results to the interrogating participating activity by mail in a manner designated by the distribution table in FLIS or as prescribed by the requester.

**3.19. REPORTS GENERATOR.** The reports generator is designed to produce one-time listings or reports from FLIS.

a. DLA Logistics Information Services will:

(1) Provide processing available to the customer through the reports generator, which consists of:

(a) Extracts of data by DRN from a FLIS file, all data found or only that data within specified limits.

- (b) Counts of data by DRN from a FLIS file, all data found or only that data within specified limits.
  - (c) Mathematical treatment of counts of data by DRN, i.e., add, subtract, multiply, or divide, including summaries and vertical or horizontal totaling.
  - (d) Sorting and formatting of processing results as specified.
  - (e) Generation of the output in the media, mode, and number of copies desired.
- (2) Input to the reports generator for the responsible participating activity.
  - (3) Examine the generated product for quality and mail it the participating activity.

b. Participating activities will:

- (1) Ensure the proper use of the reports generator capabilities to minimize requests that require special projects and programming, with their attendant delays.
- (2) Submit requests for special data extracts, including justification, through the DLA Logistics Information Services process owner.
- (3) Use the reports generator only for one-time output products, not for data that can be supplied by any other FLIS product.

**3.20. RECORD ESTABLISHMENT AND MAINTENANCE ACTIONS.** The participating activities will forward data required to establish or maintain item intelligence for their logistics functions to DLA Logistics Information Services to be processed, distributed, and maintained by the FLIS.

a. Participating activities will:

- (1) Determine the transaction for the logistics function.
- (2) Refer to the applicable DIC in technical documentation on DLA website.
- (3) Prepare data in accordance with prescribed formats.
- (4) Submit data to FLIS.

b. Originating and submitting activities will:

- (1) Prepare data in fixed length format or variable length format as determined by activity capability.
- (2) Perform collaborations before submittal to FLIS using the technical documentation on DLA website.

- (3) Accurately prepare data to avoid errors that may cause the return of transactions.
- (4) Refer to these guidelines to prepare acceptable data:
  - (a) Include all item intelligence data required in the transaction.
  - (b) Format the data properly.
  - (c) Verify completeness and correctness of data element values.
  - (d) Verify proper submittal mode selection.
- (5) Apply manual quality control measures before submittal of worksheet for automation by referring to these questions:
  - (a) Is the transaction in accordance with the latest logistics data tools?
  - (b) Are all the related segments included?
  - (c) Do the segments reflect the proper DICs?
  - (d) Is an input header included with the transaction?
  - (e) Is the data prepared in the appropriate mode, i.e., fixed or variable length input?
  - (f) Is the data required for fixed fields in all segments properly positioned?
  - (g) Is the package sequence number properly applied?

**3.21. FLIS CRS.** When there is a new release or change of General Services Administration directives, DoD Component procedures or policy, or a recommendation for a change from a DoD Component, participating agency, NATO, or participating country:

**a. Assigned Areas.** DoD or federal functional managers will, for their assigned areas:

- (1) Prepare and submit a CR for recommended changes to FLIS functional description through the DLA Logistics Information Services.
- (2) Review CRs provided by DLA Logistics Information Services.
- (3) Ensure CRs are complete in accordance with this issuance.

**b. Procedural Changes.**

- (1) The participating activity will:
  - (a) Forward recommendations for additions, deletions, and changes to FLIS procedures.

- (b) Use a telephone or other expeditious forms of communications for recommendations during emergency conditions only.
- (c) Send immediate follow-up by letter or electronic transmission to confirm request for changes to the FLIS procedures when telephone is used.

(2) DLA Logistics Information Services will:

- (a) Review all recommendations received from the participating activity for validity and applicability.
  - (b) Coordinate approved changes with the participating activity through FCC in accordance with the procedures in Volume 8 of DoDM 4140.01.
  - (c) Prepare the additions, changes, or deletions for distribution when coordination is finalized.
- (3) The participating activity will include a recommended ED in all submitted changes, which DLA Logistics Information Services will acknowledge and either agree with or propose another acceptable to all parties concerned.

(4) DLA Logistics Information Services will:

- (a) Distribute changes to the FLIS procedures to participating activities a minimum of 30 days in advance of the ED.
- (b) Announce the change to impacted participating activities as appropriate through the FCC Chair, with subsequent confirmation by normal revision, if the 30-day requirement cannot be met.
- (c) Publish changes to the participating activity-specific data maintained by the functional managers.
- (d) Provide, in advance of the ED, notification of receipt of changes and confirmation of the date when the program changes to ensure the submitting participating activity has adequate time to change its internal automatic data processing code (ADP) system. If necessary, the participating activity can receive such notification by telephone and be confirmed by letter.

(5) DLA Logistics Information Services will not subject the participating activity specific data tables to publication by FLIS advance change notice except for:

- (a) Activity codes and message address for FLIS users.
- (b) Activity codes and addresses for authorized originators, submitters, reference number activity code, and DICs authorized for submitting activities.

**c. Preparation and Processing of CRs**

(1) For all FLIS CRs:

(a) The participating activity will document the CR with the impact to FLIS and the participating activity systems.

(b) DLA Logistics Information Services will:

1. Prepare and process all CRs that NATO NCB initiated as NCS CRs using the technical documentation on DLA website.

2. Coordinate with the participating activity by the most expedient methods available in the case of emergency corrections that may alter any aspect of expected or published input to or output from FLIS, even if such changes are required to conform to existing requirements.

3. Normally implement CRs on Sundays, unless it is an emergency change that is needed before the scheduled Sunday implementation.

(2) Submitters of CRs should coordinate requirements with their participating activity functional managers to ensure the CR is compatible with all participating activity requirements.

(3) The appropriate participating activity functional manager will submit all participating activity initiated CRs to the FCC Chair.

(4) The FCC Chair will coordinate and collaborate with the FCC representatives to gain consensus on the CR.

(5) After consensus is obtained from the FCC, DLA Logistics Information Services will:

(a) Initiate a technical review of the proposed change as submitted, which will reveal the cost, manpower resources, programming required, and impact on ADP equipment.

(b) Complete the technical review within 35 calendar days.

(c) Send the CR to the NATO NCBs and Secretariat when the NCS is affected, using the technical documentation on DLA website.

(6) If the CR is denied by the FCC, DLA Logistics Information Services will:

(a) Advise the originating activity of the CR disapproval. The originating activity may submit a rebuttal of the rejection with appropriate justification to the FCC Chair.

(b) Forward CR to HQ DLA, DLA Logistics Information Services liaison or staff proponent who will work to provide resolution. If no resolution can be determined, the HQ DLA, DLA Logistics Information Services liaison or staff proponent will forward issue to the ASD(L&MR) for resolution.

(7) Each participating activity will staff the CR for review of technical and operational feasibility or concept as it pertains to their systems.

(8) Within 30 calendar days after reconciliation of all non-concurrences and comments, or if participating activities replies were all concurrences, DLA Logistics Information Services will propose an implementation schedule and coordinate the schedule with impacted participating activities.

(9) The impacted participating activities will:

- (a) Review the proposed implementation schedule and determine if they can implement into their systems in the same timeframe.
- (b) Document their concurrence or non-concurrence with the schedule and respond to DLA Logistics Information Services.
- (c) Include an implementation schedule they can accommodate, if they non-concur.

(10) After coordinating with the impacted participating activities, DLA Logistics Information Services will:

- (a) Coordinate with FCC members to resolve implementation schedule issues.
- (b) Initiate and establish the CR into the DLA Logistics Information Services Configuration Management System for system development when an impacted participating activity agreement to implementation schedule is derived or if no participating activity systems are impacted by the CR.
- (c) Send a copy of the final approved CR to the participating activity functional managers, which will include, when required, all the newly assigned DRNs and new or revised return codes.

**d. Status Reports.** DLA Logistics Information Services will provide status of CRs to the participating activity functional managers at regularly scheduled FCC meetings.

**e. Guidance for Preparing CRs.**

(1) DLA Logistics Information Services will consider the initial submission of a CR a concept CR. Participating activities submitting requests to DLA Logistics Information Services for systems changes will prepare a point paper or white paper that includes:

- (a) Title. Enter a short and concise title describing the proposed change.
- (b) Background. This will include facts bearing on the proposal and should identify the references and the policy decisions that were the basis for defining the scope of the change. For instance, if the CR is the result of a meeting or letter, or the result of a joint tasking, state which meeting, when, where, who the sponsor is, and the exact tasking. It should also identify whether the CR has minor or major impact to participating activity support systems.
- (c) Description of Change or General Objectives. Provide a description of the overall system objectives for the function impacted by the system change. Establish what is to

be done without stating specific criteria to be met in accomplishing the ADP needs of the function.

(d) Project Officer. Enter the name, office symbol, and telephone number of the individual to be contacted if any questions arise concerning the CR.

(2) Participating activities will route concept CRs for system changes to DLA Logistics Information Services through their participating activity POCs (FCC representative) to the FCC, where the CR will be distributed to the committee members to approve or deny the concept CR.

(3) Once the FCC approves a concept CR, the participating activity should modify the concept CR to include specific objectives or functional requirements. At a minimum, it should include functional statements that delineate what must be accomplished to ensure that the general objectives are met to the satisfaction of the functional manager. Once this is accomplished, DLA Logistics Information Services will consider the concept CR as a CR.

(4) The FCC will only process a CR if it meets functional requirements.

(a) The participating activity will:

1. Cite who sends the data and what elements of data will be inputted into FLIS to satisfy the objective.

2. Identify the configuration of the data element when constrained by other functions or systems.

3. Submit the proposed new transaction formats in the blanks of the example sentence: "Establish transaction \_\_\_\_\_ (to be assigned), entitled \_\_\_\_\_, which will contain segment(s) \_\_\_\_\_."

4. Project volumes involved in changes when applicable.

(b) DLA Logistics Information Services will:

1. Assign new DRNs after approval.

2. Assign new DIC and segment codes after approval.

(c) The participating activity will cite the checks and balances for the function being performed. These will consist of rules, tables, comparisons, relationships of input data elements, and, in accordance with prescribed criteria, comparison or validation of data retained in FLIS.

(d) For data retention, participating activity will:

1. Ensure that this paragraph states the functional requirements to store data elements in the system.

2. Cite what data elements will be retained in FLIS, what conditions, if necessary, must be met in terms of how long to retain the data, what data elements will be recorded in the

FLIS futures file with an ED, or other similar constraints necessary to retain the data and establish and protect its integrity while in the file.

(e) The participating activity will:

1. Cite who the data will be output to and what elements of data will be output from FLIS to satisfy the objective.

2. Identify the configuration of the data element when constrained by other functions or systems.

3. Submit the proposed new transaction output formats in the blanks of the example sentences: "Establish transaction \_\_\_\_ (to be assigned), entitled \_\_\_\_, which will contain segment(s) \_\_\_\_."

4. Project volumes involved in changes when applicable.

(f) DLA Logistics Information Services will assign new:

1. DRNs after approval.

2. DIC and segment codes after approval.

(g) The participating activity will cite the requirement for a new or revised publication, including frequency of publication, publication format, distribution, etc.

(h) The participating activity will:

1. Cite the requirement for new or revised statistical information.

2. Include in the citation the source of data, what is to be counted, how it is to be counted, and how the data is to be displayed.

(i) The participating activity will:

1. Cite the requirement to extract data from FLIS through interrogation, search, or mass data retrieval.

2. Cite media mode when required.

(j) The participating activity will enter the proposed implementation date, taking into consideration the coordination cycle for approval of the CR and the time frames required for implementation.

(k) The participating activity will:

1. Enter the appropriate priority.

2. Provide detailed justification for assignment of an expedited or emergency priority, e.g. routine minor, routine major, expedite, or emergency because a CR is required to maintain the operational status of FLIS.

(5) Participating activities will reroute CRs for system changes to DLA Logistics Information Services through their participating activity POCs (FCC representative) to the FCC Chair.

(6) FCC Chair will assign the CR to a project lead, who will coordinate the CR through the configuration management process at DLA Logistics Information Services.

**3.22. INTERFACE TEST CAPABILITY.** The DLA Logistics Information Services provides a service that allows all FLIS users to test their interface with FLIS. It provides the capability for users to test FLIS CRs or to test their own CRs as they interface with FLIS.

a. For the Standard Test Database (STDB):

(1) DLA Logistics Information Services:

(a) Maintains the FLIS STDB, which contains in excess of 12,000 NIINs.

(b) Uses production programs and support files to maintain the integrity of the data on file.

(c) Conducts special projects from CRs to change FLIS, to change output to the participating activities, or to eliminate obsolete file data or file conditions. The CR will require the same action to be taken against the STDB.

(2) Participating activities submitting CRs should include projects such as:

(a) Internal DLA Logistics Information Services changes to the file structure, for optimization purposes and which do not alter data output to participating activities.

(b) Clean-up projects performed on FLIS for a specific participating activity or the entire file, which if not performed would lock out future changes or cause rejections or system errors during processing of test transactions. Clean-up should also be performed against the STDB.

(c) Special projects that only identify erroneous conditions in FLIS; forward these to the proper participating activities for corrective action, and the errors output to the affected participating activities.

b. DLA Logistics Information Services will conduct interface testing in accordance with approved interface test plans, as required for specific FLIS or other system changes. DLA Logistics Information Services will not conduct testing, other than that required by an approved interface test plan, except by mutual agreement between DLA Logistics Information Services and the participating activities requiring the test. Agreements will be based on available

resources at DLA Logistics Information Services and priority assigned according to the project to be tested.

c. Participating activities should:

- (1) Ensure that the CR or other requirements document contains a statement that interface testing is required or interface testing is not required.
- (2) Initiate action on approval of the CR or other requirements document to start the procedure to request an interface test if it is required. This will allow DLA Logistics Information Services and other participants to schedule resources for the test for the required timeframe.
- (3) Initiate actions immediately to request a mini interface test, if an interface test is required to resolve an immediate problem.
- (4) When requiring an interface test:
  - (a) Develop the interface test plan.
  - (b) Coordinate with DLA Logistics Information Services to ensure adequate time and resources are available to support the test.
  - (c) Submit the test data to DLA Logistics Information Services.

d. Participating activities may acquire a copy of the STDB or request an interface test by contacting the DLA Customer Interaction Center: telephone 877-352-2255, FAX 269-961-7791, or email address [dlacontactcenter@dla.mil](mailto:dlacontactcenter@dla.mil).

## GLOSSARY

### G.1. ACRONYMS.

ADP	automatic data processing code
AFMCI	Air Force Materiel Command Instruction
AFR	Air Force Regulation
AMC-R	Army Materiel Command Regulation
AR	Army Regulation
ASD(L&MR)	Assistant Secretary of Defense for Logistics and Materiel Readiness
CAGE	commercial and government entity
CMD	catalog management data
CR	change request
DCA	design control activity
DCN	document control number
DIC	document identifier code
DLA	Defense Logistics Agency
DLAR	Defense Logistics Agency Regulation
DoDI	DoD instruction
DoDM	DoD manual
DRN	data record number
DTRA	Defense Threat Reduction Agency
EBS	Enterprise Business System
ED	effective date
FCC	Federal Cataloging Committee
FCP	Federal Catalog Program
FCS	Federal Cataloging System
FLIS	Federal Logistics Information System
FMS	foreign military sales
FSC	Federal Supply Classification
HQ	headquarters
I&S	interchangeability and substitutability
IEC	item entry control
IIG	item identification guide
IMC	item management coding
IMM	integrated materiel manager
INC	item name code
MCO	Marine Corps Order
MOE	major organizational entity

NATO	North Atlantic Treaty Organization
NAVSUPINST	Naval Supply Instruction
NCAGE	North Atlantic Treaty Organization commercial and government entity
NCB	National Codification Bureau
NCS	North Atlantic Treaty Organization Codification System
NIIN	national item identification number
NMFC	National Motor Freight Classification
NOCO	Nuclear Ordnance Cataloging Office
NSA	National Security Agency
NSN	national stock number
ODRC	output data request code
OE	organizational entity
PICA	primary inventory control activity
POC	point of contact
PSMAT	Provisioning Screening Master Address Table
SICA	secondary inventory control activity
SoS	source of supply
STANAG	Standardization agreement
STDB	standard test database
TIR	total item record
USAF	U.S. Air Force
USD(AT&L)	Under Secretary of Defense for Acquisition, Technology, and Logistics
USMC	U.S. Marine Corps
USN	U.S. Navy

**G.2. DEFINITIONS.** Unless otherwise noted, these terms and their definitions are for the purpose of this issuance.

**advance change notice.** A notification to users of changes that must be implemented between quarterly publication of changes and revisions of the FLIS.

**cataloging.** The process of uniformly identifying, describing, classifying, numbering, and publishing in the Federal Catalog System all items of personal property (items of supply) repetitively procured, stored, issued, or used by federal agencies.

**CMD.** Consists of standard data elements; the using activity develops the peculiar data entries in the FLIS.

**DCN.** A data chain generated for input and perpetuated in output packages. Used to create a unique identifying number for immediate identification of each transaction

**DIC.** Identifies a transaction to the system to which it pertains and its intended usage.

**DRN.** Four numeric characters assigned to identify and control a functionally oriented data element used in the FLIS.

**ED.** The year and Julian day that denote the date that a predetermined condition or action becomes effective in the defense logistics system (e.g., 04122 is 1 May 2004).

**FCP.** A government-wide program to provide a uniform system of item identification; preclude or eliminate different identifications of like items; reveal interchangeability among items; aid in parts standardization; facilitate intra- and inter-departmental logistics support; and improve materiel management and military effectiveness by promoting efficiency and economy in logistics operations.

**FCS.** A federal program that DoD administers in conjunction with the General Services Administration. It names, describes, classifies, and numbers each item the U.S. Government repetitively uses, buys, stocks, or distributes so that only one distinctive combination of letters and numerals identifies the same item throughout the U.S. Government.

**FLIS.** A management system designed to collect, store, process, and provide item-related logistics information.

**FSC.** A system by which all items of personal property that are used by all participating activities are classified. FSC contains groups and classes of commodities with emphasis on the items known to be in participating activities' supply systems.

This classification system is based on current as well as anticipated management needs.

The FSC structure is modified as the needs of management change by the addition of newly developed groups and classes, the subdivision of existing classes, and the revision of definitions of classes.

The uniform FSC is governed by daily management requirements and provides uniform management categories throughout Service activities and participating agency and participating countries organizations, functions, operations, and supply pipelines.

It permits greater uniformity within and between the participating activities in the operations of reporting, accounting, financial management, inventory control, and budgeting.

**I&S.** Conditions that permit the exchange of one item for another without affecting design or performance beyond acceptable limits.

**IMC.** The process of determining whether items of supply in FSC classes assigned for integrated materiel management qualify for the individual Military Services' or other DoD

Components' management. Coding is accomplished in accordance with established IMC criteria contained in DoDM 4140.26.

**IMM.** Any activity or agency that has been assigned integrated wholesale materiel management responsibility for the DoD and participating federal agencies. IMM responsibilities include requirements determination, procurement, distribution overhaul and repair of repairable materiel, and disposal of materiel.

**inactive item.** An item without a wholesale demand in the last 5 years for which no current or future requirements are anticipated by any registered user or the materiel manager.

**integrated materiel management.** Defined in the DoD Dictionary of Military and Associated Terms.

**item identification.** A collection and compilation of data to describe an item. The minimum data to develop an item identification are a combination of the item name, CAGE, manufacturers' identifying part or reference number, Reference Number Category Code, and Reference Number Variation Code. It may also include the item name, all of the physical and performance characteristics data that a specific IIG prescribes, the manufacturers' identifying part or reference number, and additional related reference numbers.

**item of production.** A part, piece, object, equipment, or material that is produced by a manufacturer, is grouped within a manufacturer's identifying number, and conforms to the same engineering drawing, standard, specification, and inspection.

**item of supply.** One or more items of production that are functionally interchangeable and comparable in terms of use. An item of supply that is functionally similar but produced with more stringent characteristics than the normal item of production, (e.g., a selection of closer tolerance, specific characteristics, or finer quality), will constitute a unique item of supply. It is defined by physical characteristics material content, chemical composition, electrical data, dimensions, and the formation or arrangements of its parts and by performance characteristics special or peculiar action or service provided by and expected of the item by virtue of its physical characteristics.

**item unique identification.** Defined in DoDI 8320.04.

**mass change.** A process initiated by maintenance actions to the TIR, e.g., tables, guides, edits, and cataloging tools. Revisions to multiple FLIS items or other sections of the TIR. DLA Logistics Information Services uses two methods: pre-programmed mass change and special project.

**NSN.** Defined in the DoD Dictionary of Military and Associated Terms.

**OE.** An organizational element, segment, or entity for cataloging and attributing data ascribed in the entity (e.g., DoD activity address code, bidders, manufacturing or nonmanufacturing activity, or establishment) for the purpose of intensifying its meaning, characteristics, responsibility, eligibility, and area(s) of authority.

**originating activity.** Those activities that are the source of data content and logistical responsibilities to the U.S. Government.

**participating activity.** All DoD Components, participating agencies, and participating countries in the FCP that use the FCS for a uniform system of item identification.

**participating agency.** Federal agency organizations participating with the DoD Components in the FCP for a uniform system of item identification.

**participating country.** NATO member nations and other foreign governments and agencies participating with the DoD Components in the FCP pursuant to NATO STANAG 3150 for a uniform system of II.

**PICA.** The DoD Component inventory control point designated as the single activity within the DoD responsible for providing materiel support.

**SICA.** The DoD Component inventory control point receiving materiel support from the PICA for selected logistics functions.

**STDB.** A database maintained at DLA Logistics Information Services with data input by participating activities included in the interface test program.

**submitting activity.** Those activities authorized to submit data gained from the originating or other participating activity to be used in the FCP, to include IMMs and specific participating agencies.

**supply support request.** A request submitted by the activity responsible for supporting an end item's being provisioned to a commodity IMM, which manages some of the support items or is a potential manager of some new support items used in the end item.

**tailored interrogation.** An extract of data based on the submitted NIIN.

**TIR.** The segment of the FLIS data bank containing the sum total of information, guides, program subroutines, tables, rules, controls, statistics, codes, terms required to support or specify the content and utilization of the FLIS. The TIR is comprised of the following files: OE, Item Name, FSC, Item Identification Guide, Table Look-Up, Graphics, Process Control, Mass Changes to FLIS, Mass Data Retrieval, and Tailored Data Interrogations.

## REFERENCES

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- AR 715-13/DLAR 3200.1/NAVSUPINST 4120.30/AFR 400-40/MCO 4000.18C, "Engineering Support for Items Supplied by the Defense Logistics Agency and General Services Administration," March 13, 1986
- Defense Federal Acquisition Regulation Supplement, current edition
- Defense Logistics Agency Cataloging Handbook H2, "Federal Supply Classification: Groups and Classes," current edition
- Defense Security Cooperation Agency Manual 5105.38-M, "Security Assistance Management Manual (SAMM)," current edition
- DLAR 4140.66/AFMCI 20-101/AMC-R 700-30/NAVSUPINST 4410.57/MCO 4410.24A, "Elimination of Duplication in the Management and Logistics Support of Interchangeable and Substitutable Items," August 15, 1997
- DoD 4140.26-M, "DoD Integrated Materiel Management (IMM) for Consumable Items," dates vary by volume
- DoD Directive 5134.12, "Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD(L&MR)), May 25, 2000, as amended
- DoD Instruction 4140.01, "DoD Supply Chain Materiel Management Policy," December 14, 2011
- DoD Instruction 8320.04, "Item Unique Identification (IUID) Standards for Tangible Personal Property," September 3, 2015
- DoD Instruction 8500.01, "Cybersecurity", March 14, 2014
- DoD Instruction 8530.01, "Cybersecurity Activities Support to DoD Information Network Operations," March 7, 2016
- DoD Manual 4120.24, "Defense Standardization Program (DSP) Procedures," September 24, 2014
- DoD Manual 4140.01, "DoD Supply Chain Material Management Procedures," February 10, 2014, as amended
- DoD Manual 4140.68, "Integrated Materiel Management of Nonconsumable Items," September 2, 2014, as amended
- North Atlantic Treaty Organization Standardization Agreement 3150, "Codification – Uniform System of Supply Classification," Edition 8, March 30, 2004
- North Atlantic Treaty Organization Standardization Agreement 3151, "Codification – Uniform System of Item Identification (II)," Edition 9, March 30, 2004
- North Atlantic Treaty Organization Standardization Agreement 4177, "Codification – Uniform System of Data Acquisition," Edition 5, June 14, 2007
- North Atlantic Treaty Organization Standardization Agreement 4199, "Codification – Uniform System of Exchange of Materiel Management Data," Edition 4, March 30, 2004

North Atlantic Treaty Organization Standardization Agreement 4438, "Codification of Equipment – Uniform System of Dissemination of Data Associated with NATO Stock Numbers," Edition 2, March 30, 2004

Office of the Chairman of the Joint Chiefs of Staff, "DoD Dictionary of Military and Associated Terms," current edition

United States Code, Title 5

25. Provides subject matter expertise for design and test business scenarios, functional specifications, and policy changes for EBS functionality.
26. Liaison between J3 and DLA Distribution to integrate efficiencies to the distribution network.
27. Plans and manages implementation of materiel distribution and inventory management - eliminates duplicative and redundant efforts across the supply chains. Develops and oversees strategic supply chain modeling.
28. Develops an agile architecture with flexibility to incorporate near and long term additions to the distribution network.
29. Chairs the Stock Positioning Steering Group – assures compliance to transportation regulatory guidelines, discuss issues, and evaluate processing changes; recommends improvements to support OCONUS Distribution depot processing.
30. Manages Inventory Policy Optimization.

**TECHNICAL & QUALITY ASSURANCE DIVISION (J344) (G3-J344)**

General Order No: 13-13

Effective Date: November 2013

**MISSION:** Develops, evaluates and implements DoD/DLA policies and procedures for technical support to procurement, quality assurance, and item standardization; establishes and manages engineering oriented cost saving programs; provides business process improvements and guidance on veterinary matters. Provides Technical and Quality Assurance oversight on the implementation of laws governing support to Federal Agencies. Manages the development, review, analysis, and application of policies, plans, programs, and systems relating to hazardous materiel logistics programs for DLA and DoD. Coordinates the Technical and Quality Assurance Program across the DLA Field Level Activities.

**FUNCTIONS:**

1. Process Owner for Technical and Quality Assurance processes. Manages the Technical and Quality Assurance workflow within the EBS and systems related interfaces. Identifies and implements process improvements.
2. Develops policy, procedures, and guidance for providing necessary engineering and technical support to procurement; ensures the proper configuration of materiel.
3. Manages the following Programs:
  - Counterfeit Prevention & Detection
  - Critical Item Management
  - Engineering Support
  - Quality Assurance
  - Product Quality Deficiency Reporting
  - Government-Industry Data Exchange
  - Item Unique Identification
  - Value Management
  - Cataloging Policy

- Logistics Reassignment
  - Technical Data Management
  - Materiel Standardization
  - Testing
  - Trade Security
  - Demilitarization
  - Packaging
  - Shelf Life
  - Stock Readiness
4. Develops policy and procedures for acquisition, storage, control, retrieval, and dissemination of technical data, for quality assurance of DLA purchased materiel, and to reduce the risk of counterfeit products and malicious code within DLA's supply chain.
  5. Develops policy and procedures regarding program management and oversight of the DoD Demilitarization and the DoD Trade Security Controls Programs.
  6. Provides program management of the Product Qualification Program, Parts Management Program, Item Reduction Program, and DLA Standardization Program to include military specifications and standards, non-Government standards, and Commercial Item Descriptions.
  7. Provides program management of the DLA Product Verification and Product Testing, to include DLA laboratories and depot level testing.
  8. Provides program management, develops policies and procedures, and administers the DLA Value Management and DLA Organic Manufacturing Programs. Value Management includes Value Engineering, Spare Parts Breakout, Price Challenge, Reverse Engineering, and the Replenishment Parts Purchase or Borrow Programs.
  9. Develops requirements, assists in content development and maintain Defense Acquisition Workforce Improvement Act certification for technical and quality assurance personnel.
  10. Develops policy and procedures, and guidance relating to the wholesomeness and quality of the contracting, inspecting, distributing, storing, and handling of subsistence.
  11. Investigates reported field subsistence inspection problem areas. Monitors effectiveness of subsistence inspection systems; conducts onsite visits, reviews quality, audit, and other reports, and liaison with other agencies.
  12. Leads the DLA Supply Chain Sustainability, Hazardous Materials, and Hazardous Minimization Programs; supports Service activities, which facilitate environmental protection, pollution prevention, environmentally responsible products and services; complies with local, state, national, and international hazardous material and environmental regulatory guidance.
  13. Initiates and prioritizes Technical Quality system change requirements; provides subject matter expertise for design and test business scenarios, functional specifications and policy changes for IT Systems functionality.
  14. Coordinates and collaborate with Engineering Services to identify deficiencies, concerns and participate in Joint DLA/Service working groups.
  15. Provides program management, develop policy and procedures, and administers the DoD Shelf Life and the DoD Stock Readiness Programs; coordinates and collaborates with the MILSVCs.

34. Sustains supporting documents, audit-ready process and system documentation for O2C and P2S assertion packages; continually monitors services and key controls that impact the Statements on Standards for Attestation Engagements (SSAE16) assertion package.
35. Engages Auditors and independent reviewers to perform annual audit for the O2C and P2S business cycles; responds to findings and take corrective actions.
36. Ensures P2S business cycle is executed and existence & completeness of DLA inventory is documented for the FIAR plan.
37. Integrates WAWF/iRapt interface functionality into all DLA supply chains; establishes systems interface (requirements identification, testing, and deployment) and functional support teams (user access and training).
38. Leads WAWF/iRapt testing, training, and implementation in DLA.
39. Assists in the development and execution of DLA WAWF/iRapt – Receipt Acceptance procedures; ensures systems interface requirements are within DoD established materiel receipt acceptance and accountability policies.

## **DISPOSAL POLICY AND COMPLIANCE DIVISION (J349) (G3-J349)**

General Order No. 08-15

Effective Date: October 2015

**MISSION:** Develops, evaluates and ensures implementation of DoD/DLA policies and procedures regarding all aspects of disposal. Develops and administers plans, programs, policies, and procedures for the disposition of materiel to include the disposition of excess, surplus and foreign excess property. Assesses the impact of policy/legislative requirements from DoD and Congress. Serves as DLA interface with OSD SCI on disposal related matters. Provide oversight and compliance of Disposal operations and ensures continuous process improvements and sustainment of auditable disposal processes.

### **FUNCTIONS:**

1. Develops policy, issues program guidance and provides oversight for the execution of the DoD Physical Inventory Control Program at disposal sites; i.e., item accountability, control, and stewardship.
2. Functional proponent for the DLA Inventory Control Point and DLA Disposition systems - reviews and develops proposed information exchange process change requests, coordinates within DLA and the other DoD Components and approves changes.
3. Develops and implements policies and procedures for establishing and maintaining formal property accountability records; develops business rules and functional descriptions for system support requirements.
4. Analyzes and interprets Supply Process Review Committee changes and DLMS functionality to assess systemic and operational impact and articulate functionality changes to system design personnel for impact to disposal operations and systems.
5. Develops policy and provide oversight for the Disposition reconciliation process between EBS and the disposal warehousing systems (such as DSS and Federal Excess Property Management Information System) for property owned by DLA Disposition. Prepares action plans for implementation across plants.

6. Provides subject matter expertise for design and test business scenarios, functional specifications and policy changes for IT Systems functionality relating to disposal and disposition inventory management operations.
7. Maintains the DSS RFC Standing Priority Lists for DLA Disposition Services; reviews the RFCs and provides recommendations for approval.
8. Provides functional guidance and conducts reviews of course material for EBS/DSS re-engineering projects/initiatives. Manages, evaluates, tests and reviews EBS On-Line Help artifacts including Job Aids, Process Papers, procedure Guidance, and Business Rules. Develops, revises and conducts Inventory Management related training for the MSC Business Process Analysts.
9. Assists the DoD Program Manager and EA for the DoD Disposition Program. Develops, coordinates, and approves the DoD Materiel Disposition Program IAW the Defense Materiel Disposition Manual DoD4160.21-M.
10. Provides technical guidance for negotiating Acquisition and Cross Service agreements at DoD/State Department level and for performance of Military contingency operations involving the disposal of foreign excess personal property.
11. Develops, evaluates, issues, and ensures implementation of policies, procedures, and processes used for DoD disposal of excess and surplus personal property; provides technical guidance to DLA Disposition Services.
12. Conducts Operational Effectiveness Reviews at DLA Disposition Field locations and conduct physical inventories and compliance reviews.
13. Assists the DoD Program Manager and EA for the DoD Demilitarization Program.
14. Provides plans, policies, and procedural guidance to DLA Criminal Investigations Activity for the DoD Trade Security Control Program relating to disposal of excess and surplus Munitions List Items and Commerce Control List Items.
15. Ensures compliance and oversight of the DoD Precious Metals Recovery Program and the cost effective recovery and reuse of precious metals from surplus DoD materials.
16. Project Manager of Long-Term Storage operation - facilitates teaming efforts and contract support on Business Case Analysis and Operational Assessment reviews.
17. Provides policy and oversight, and assists in management of the Law Enforcement Support Office program.
18. Coordinates and implements chemical management throughout the DoD.
19. Provides agency guidance to ensure compliance with DoD regulations on the proper disposal of hazardous waste.

**NUCLEAR ENTERPRISE SUPPORT EXECUTIVE DIRECTORATE (NESO) (G3-J3N)****NUCLEAR READINESS BRANCH (G3-J3N1)****POLICY AND PLANS BRANCH (G3-J3N2)**

General Order No: 08-15

Effective Date: October 2015

**MISSION:** Serves as HQ DLA's leading face to the customer for all DLA-related nuclear enterprise issues, as well as coordinating all internal DLA support to include development of the DLA nuclear enterprise specific policies, procedures and strategic messaging.



IN REPLY  
REFER TO

## DEPARTMENT OF DEFENSE

DEMILITARIZATION / TRADE SECURITY CONTROLS PROGRAM OFFICE  
8725 JOHN J. KINGMAN ROAD  
FORT BELVOIR, VIRGINIA 22060-6221

Jan 29, 2015

### DoD DEMILITARIZATION (DEMIL) PROGRAM MANAGER GUIDANCE

SUBJECT: DESIGNATION OF HIGH MOBILITY MULTIPURPOSE WHEELED VEHICLE (HMMWV) AS NON-SENSITIVE, DEMIL CODE Q6

The Department of State (DoS) and Department of Commerce (DoC) have agreed that M998 and M1038 non-armored or armored (soft side) HMMWV's are no longer controlled under Parts 120-130 of title 22 Code of Federal Regulations (CFR). Instead, they are now controlled under Parts 730-774 of title 15 CFR, export control classification number (ECCN) 0A606. In light of this regulatory change, the DoD DEMIL Program Manager (DDPM) directed the DoD Demilitarization Coding Management Office (DDCMO) to assign DEMIL Code Q to these HMMWV's with ECCN 9EAR6 indicating they are non-sensitive.

Model	NSN
M998	2320-01-107-7155
M998A1	2320-01-371-9577
M1038	2320-01-107-7156
M1038A1	2320-01-371-9578

As a result, these vehicles are authorized for donation or sale without DEMIL or mutilation (MUT). Requirement of DoD Instruction (DoDI) 2030.08 for TSC assessments prior to sale or donation still applies. Also, the Defense Logistics Agency Disposition Services (DLA DS) will require the purchaser to address any Environmental Protection Agency (EPA) or National Highway Traffic Safety Administration (NHTSA) requirements.

If there are any questions or concerns regarding this matter, please contact the undersigned at (703) 767-7291, or email.Jeff.Garret2.civ@mail.mil

// signed *tgj* //

JEFF GARRETT  
Program Manager  
DoD Demilitarization

**Strategic Distribution and Disposition (SDD) Requirements & Justification  
DLA Disposition Services  
DEMIL Code "C" Vehicle Sales BCA**

**RECOMMENDATION:**

Approve development of the DEMIL Code "C" Vehicle Sales Business Case Analysis (BCA) for the DLA Disposition Services under the DLA Strategic Distribution and Disposition (SDD) Program. This initiative supports the Defense Logistics Agency Director's Big Ideas to Rightsize Inventory and Decrease Operating Costs.

**BACKGROUND:**

Under current policy, excess military vehicles are demilitarized and sold for scrap, recovering only a fraction of their potential value. However, in order to sell surplus vehicles to the public there are a number of hurdles that must be overcome. Vehicles must be demilitarized by removing armor, weapons components, active protection systems, etc. This is complicated by the fact that after manufacture vehicles are routinely modified in service, with no standard configurations or National Stock Numbers (NSNs) to identify them. Turn-in documents are not likely to reflect the specific modifications made and therefore each vehicle must be evaluated individually. Procedures therefore need to be developed to evaluate and demilitarize each vehicle individually.

**PURPOSE:**

The purpose of this study is to determine the cost effectiveness of modifying DEMIL Code "C" wheeled vehicles to acceptable civilian specifications and make them available for commercial sale.

**REQUIREMENTS & SCOPE:**

- Conduct a BCA Level I to:
  - Identify and list key components for DEMIL "C" wheeled vehicles in order that prohibited components can be removed, allowing vehicles to be sold rather than scrapped.
  - Determine potential financial costs/benefits of demilitarizing and selling vehicles to the public.
  - Identify legal, policy, or procedural issues that must be addressed prior to selling vehicles to the public.
  - Identify potential risks and develop Risk Management Plan for mitigating them.
- The scope of this BCA will be limited to wheeled vehicles (High Mobility Multipurpose Wheeled Vehicles (HMMWVs) or trucks) with a DEMIL code of "C".

MILESTONES:

October 16, 2014	Kick-off Meeting (telecon)
October 31, 2014	Requirements and Justification Document Complete
November 25, 2014	R&D and Analytic Strategies visit to Anniston DEMIL Chief
January 16, 2015	Interim progress report/brief to DLA Disposition Services Director via VTC
April 3, 2015	BCA complete and presented to staff for review/comment
April 16, 2015	Final analysis report and out-brief to DLA Disposition Services Director in Battle Creek.

FUNDING/DURATION:

Funding will be provided from DLA J34's Strategic Distribution and Disposition (SDD) Program, SDD IV (Task Order 45 to contract SP4703-10-D-0002, dated 4/1/13-11/3/14) and SDD V (Task Order 13 to contract SP4703-14-D-0002, dated 11/4/14-11/3/15). The BCA is estimated to require \$79K in labor (1.25 FTE for 6 months) and \$6K in travel.

APPROVAL:

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MICHAEL O. CANNON  
Colonel, USAF  
Director, DLA Disposition Services

*12 Nov 2014*

Date

POINTS OF CONTACT:

Name	Role	Phone	Email
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Mr. Laurence Norvey	Disposition Services Controlled Property Division SME (J31)	269.961.5164	<a href="mailto:laurence.norvey@dla.mil">laurence.norvey@dla.mil</a>
TBD	Customer Support (J4) Sales Office	TBD	TBD
TBD	General Counsel (DG)	TBD	TBD

*October 29, 2014 ~ v3 (final)*